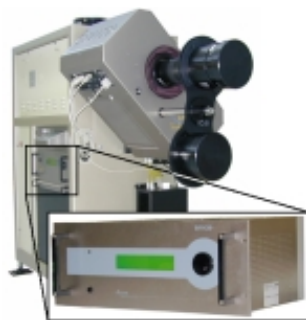




**BARCOPROJECTION**



**ACSAR**

**R9806700**

**INSTALLATION MANUAL**

**Barco nv Digital Cinema**

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Introduction to the user :

If this equipment does cause interference to radio or television reception, the user may try to correct the interference by one or more of the following measures :

- Re-orientation of the receiving antenna for the radio or television.
- Relocate the equipment with respect to the receiver.
- Plug the equipment into a different outlet so that the equipment and receiver are on different branch circuits.
- Fasten cables connectors to the equipment by mounting screws.



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---

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# 1. SAFETY INSTRUCTIONS

## Overview

- General
- General Safety Instructions
- Electrical safety on Power Connection
- Protection on Servicing
- Safety on Shipping

## 1.1 General

### Scope

This document includes safety considerations of the ACSAR. Throughout this manual, the term SERVICE PERSONNEL refers to persons having appropriate technical training and experience necessary to be knowledgeable of potential hazards to which they are exposed (including, but not limited to HIGH VOLTAGE ELECTRIC and ELECTRONIC CIRCUITRY and HIGH BRIGHTNESS PROJECTORS) in performing a task, and of measures to minimize the potential risk to themselves or other persons. The term USER and OPERATOR refers to any person other than SERVICE PERSONNEL, AUTHORIZED to operate the installed D-Cine projector.

### Owner's Record

The part number and serial number are indicated on the registration plate which is located at the right side of the ACSAR. Record this number in the space of the table provided below. Refer to them whenever you call upon your BARCO dealer regarding these products.

Name	Parts Number	Serial Number	Dealer
ACSAR			

## 1.2 General Safety Instructions

---

### Shock Hazard

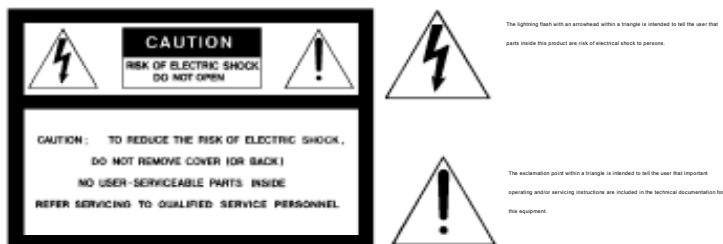


Image 1-1

### General safety instructions

- Before operating your ACSAR, please read this manual thoroughly, and retain it for future use.
- Installation and preliminary adjustments should be performed by qualified BARCO service personnel or authorized BARCO service dealers.
- All warnings on the system parts and in the documentation manual should be adhered to.
- All instructions for operating and use of this equipment must be followed precisely.
- All local installation codes should be adhered to.



## 1.3 Electrical safety on Power Connection

---

### Rating & Groundings

- This product should be operated from an AC power source. Check if the mains voltage and load matches the product electrical ratings.
- A grounded three-core power cable has to be used. Connect the power cord by inserting it in a grounded electrical outlet, making sure that the cord is properly grounded.
- If you are unable to install the AC Requirements, contact your electrician. Do not defeat the purpose of the grounding.
- Always connect this appliance to an electrically grounded outlet. Never use a ground bypass (cheater) adapter.

### General

- Always plug power cord into appliance before plugging into outlet.
- Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
- Always unplug appliance from electrical outlet before cleaning and servicing and when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.
- Do not operate appliance with a damaged cord or if the appliance has been dropped or damaged - until it has been examined by a qualified serviceman.
- Position the cord so that it will not be tripped over, pulled, or contact hot surfaces.
- If an extension cord is necessary, a cord with a current rating at least equal to that of the appliance should be used. Cord rated for less amperage than the appliance may overheat.
- Let appliance cool completely before storing. Remove cord from appliance when storing.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electrical shock.
- Never spill liquid of any kind on the product. Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified service personnel before resuming operations.
- Lightning - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the projector due to lightning and AC power-line surges.

## 1.4 Protection on Servicing

---

### Servicing

Do not attempt to service the installed module yourself, as opening or removing covers may expose you to dangerous voltage potential and risk of electric shock! Refer all ACSAR service to a qualified BARCO service center.

Call for service in the following conditions :

- When the power cord or plug is damaged or frayed.
- If liquid has been spilled into the modules.
- If the product has been exposed to rain or water.
- If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of the other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation;
- If the product has been dropped or the cabinet has been damaged;
- If the product exhibits a distinct change in performance, indicating a need for service.

### Replacement Parts

When replacement parts are required, be sure the service technician has used original BARCO replacement parts or authorized replacement parts which have the same characteristics as the BARCO original part. Unauthorized substitutions may result in degraded performance and reliability, fire, electric shock or other hazards. Unauthorized substitutions may void warranty.

### Safety Check

Upon completion of any service or repairs to these modules, ask the service technician to perform safety checks to determine that the modules are in proper operating condition.

## **1.5 Safety on Shipping**

---

### **Original Shipping package**

Save the original shipping packing material; they will come in handy if you ever have to ship ACSAR. For maximum protection, repack your set as it was originally packed at the factory.

## 2. ACSAR PACKAGE CONTENTS

### 2.1 Contents of the ACSAR package

#### Main part

The main part of the package contents is:

Item	Art. No	Description
ACSAR	R9806700	Alternative Content Switcher & Router
Inclusive modules	R763597	DVI Output
	R763753	Output Interface
	R7630355	Remote Control



Image 2-1  
ACSAR

#### Supplied accessories

Item	Art. No	Description
Power Cord	R326103 (image 2-2)	CEE C13 2M5
Power Cord	R3261115 (image 2-3)	NEM5C13 2M
Cable DVI 24P24P	Z34875232 (image 2-7)	Connection cable DVI
Remote Control RC5	R7630355 (image 2-5)	Infra Red remote control RC5
Batteries	G100810 (image 2-4)	2x AA size batteries for Remote Control

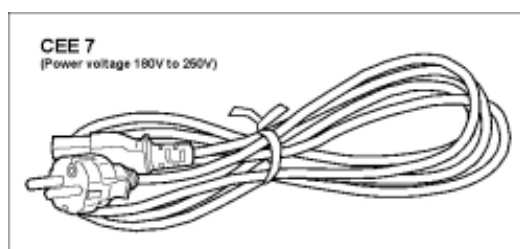


Image 2-2  
Power cord CEE

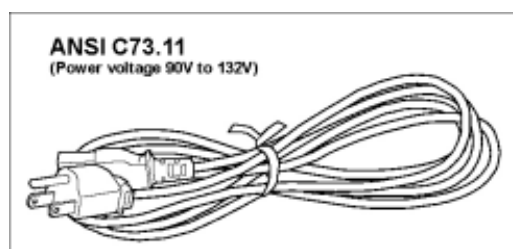


Image 2-3  
Power cord ANSI

## 2. ACSAR package contents

---



Image 2-4  
AA size batteries



Image 2-5  
Remote control RC5



Image 2-6  
RS232 cable



Image 2-7  
DVI cable

## 3. ACSAR CONCEPT

### Overview

- Alternative Content Switcher and Router
- ACSAR on Module level

### 3.1 Alternative Content Switcher and Router

#### Modular convenience

- Quick and easy configuration
- For the permanent connection of any combination of fixed inputs plus the connections of temporary sources.
- Compatible with almost any digital or analog input.

#### Convenient image Formatting, Switching and Routing

Advanced Barco pixel map processing (PMP) for the scaling and reformatting of any standard or HD video or PC input to the native 1280x1024 format of the D-Cine digital head.

#### Simple operation

With a wide range of operating features, a choice of a simple front panel or remote control via the D-Cine LCD touch panel or Barco's RC5 infra red controller, plus a preview monitor output for cueing and seamless switching of selected video inputs.

### 3.2 ACSAR on Module level

#### Video Input modules

The ACSAR allows the insertion of 8 hot plug-in Video modules.

Module	Description	Order Reference
RGB Analog	Sync H & V Sync Composite Sync on Green	R9841040
SDI	Serial Digital Input	R9841120
HD SDI	High Definition SDI	R9841110
Analog Video	Composite Video S-Video with digital decoder	R9841030
DVI	Digital Versatile Interface	R9841070

#### In- / Output modules (parts of the unit)

Module	Description
DVI Output	Digital Versatile Interface standard output linked to the DVI input of the projector head.
2x D9 RS 232 connectors	In/out RS232 communication
Single board PC (IP Address)	Via an optional single board computer with remote network management

### 3. ACSAR Concept

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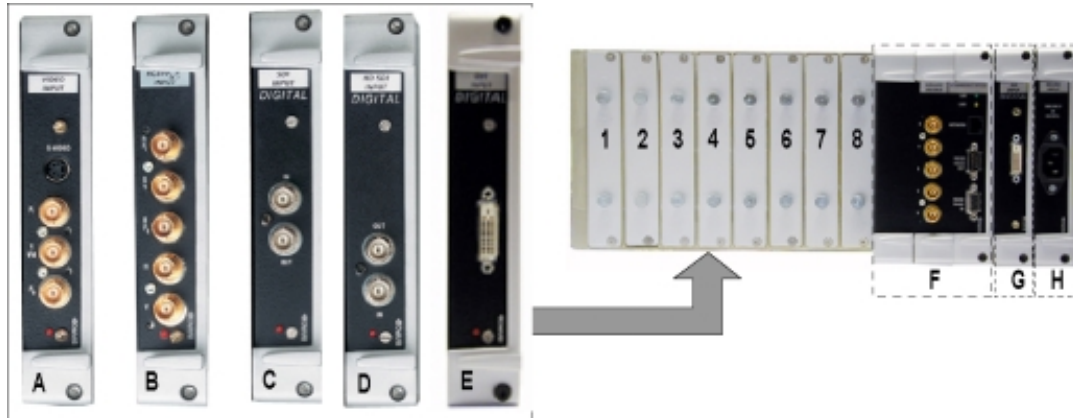


Image 3-1

- A Video/S-Video/Component input module
- B RGB-HV input module
- C SDI Input module
- D HD SDI input module
- E DVI input module
- F RGB-HV Out & RS 232 communication In/Out
- G DVI Output
- H Power input module
- 1-8 Input slots

## 4. DIMENSIONS OF THE ACSAR

### 4.1 ACSAR

#### Outside dimensions

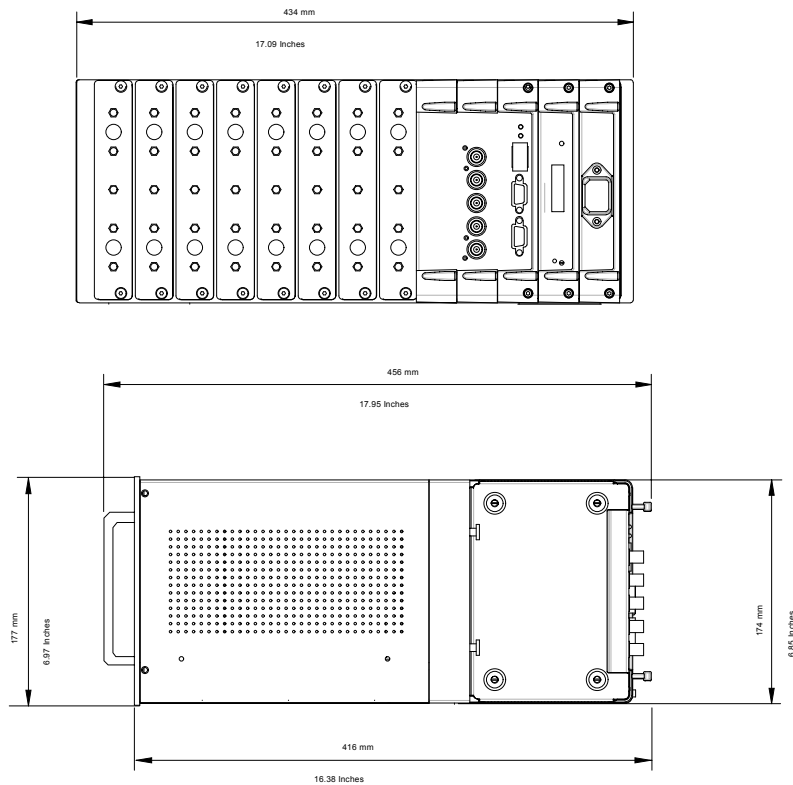


Image 4-1  
Outside dimensions

#### Rack specification

The ACSAR fits into a 19" rack (w) x 4u (h) x 400 (d) mm with input modules.





## 5. MOUNTING THE ACSAR INTO THE CONSOLE



Before proceeding to the mechanical installation of the ACSAR unit, resulting in opening the console, be sure the console has been switched off totally (Refer to the installation manual for switching off the console).

### 5.1 Installation of the ACSAR

#### Necessary tools

Cross point screw driver of 5 mm.

#### How to install the ACSAR unit in the console

1. To be able to install the ACSAR unit, remove the following covers on the console:
  - Dummy cover plate (B): remove the 4 screws securing plate to console and remove the cover. Retain screws for the fixation of the ACSAR unit. (image 5-1)
  - Side cover with power switch (A): remove the 4 screws securing plate to console. Take the cover out of console frame and put it beside the console (cover displacement limited by the ground cable and the power switch connection). Retain screws for reinstallation of the cover (image 5-1).
  - Main power cover (C): remove the 4 screws securing plate to console and remove the cover (cover displacement limited by the ground cable). Retain screws for reinstallation of the cover. (image 5-2)
2. Carefully slide the ACSAR unit on its place in the console, taking care that the bottom of the unit rest on the provided support (D). (image 5-3, image 5-4)
3. Secure the position of the unit with the 4 retained screws. (image 5-5)
4. Continue with the electrical connections of ACSAR power, communication and DVI.

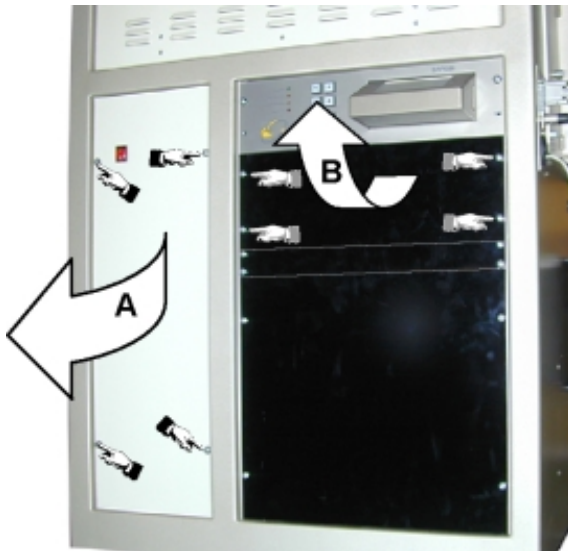


Image 5-1  
Cover removal left side console

- A Side cover with power switch
- B Dummy cover plate

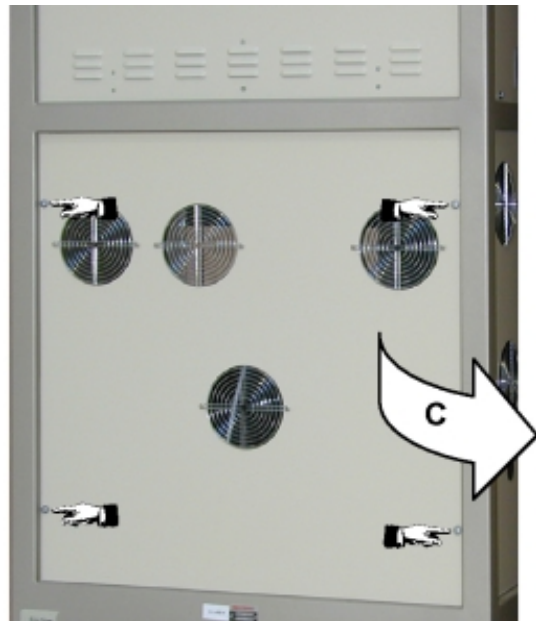


Image 5-2  
Cover removal right side console

## 5. Mounting the ACSAR into the Console

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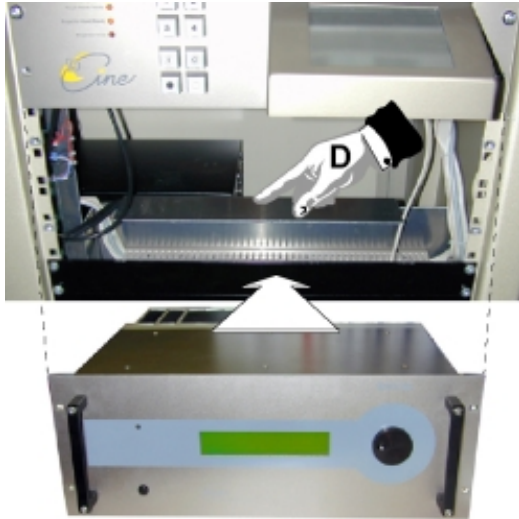


Image 5-3  
Insertion of the ACSAR into the console



Image 5-4  
Rear view ACSAR unit on support



Image 5-5  
Securing the ACSAR onto the console frame

## 5.2 Connecting the ACSAR to console

### Which connections have to be made:

- Power connection.

AC Power Voltage		Auto Range 100 – 240V
AC Power Current		1 A / 50 – 60 Hz
Main Fuses		Standby Power Supply: T 2AH/250V Main Power Supply: F 4A L 250V
Power Consumption		
	Normal operation mode	78 W Depending on input configuration
	Standby mode	8 W
	Economic standby mode	4 W

- RS 232 communication between ACSAR, Touch panel and Digital Head.
- DVI link between DVI output ACSAR and DVI input Digital Head.

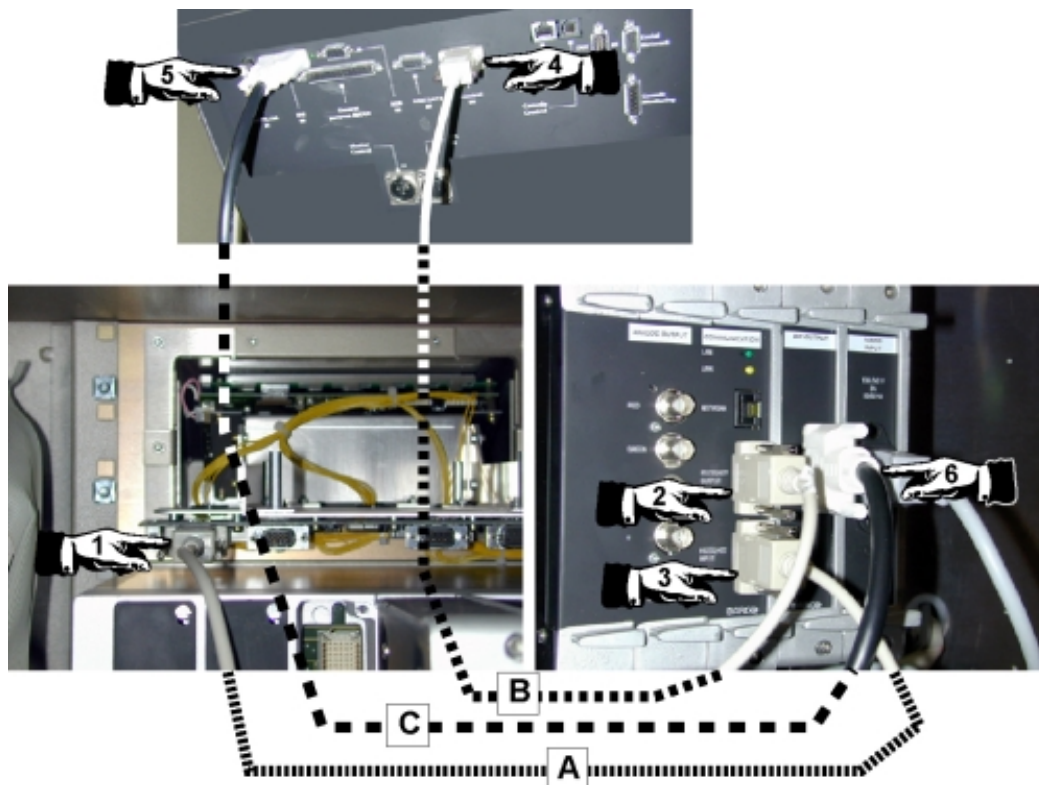
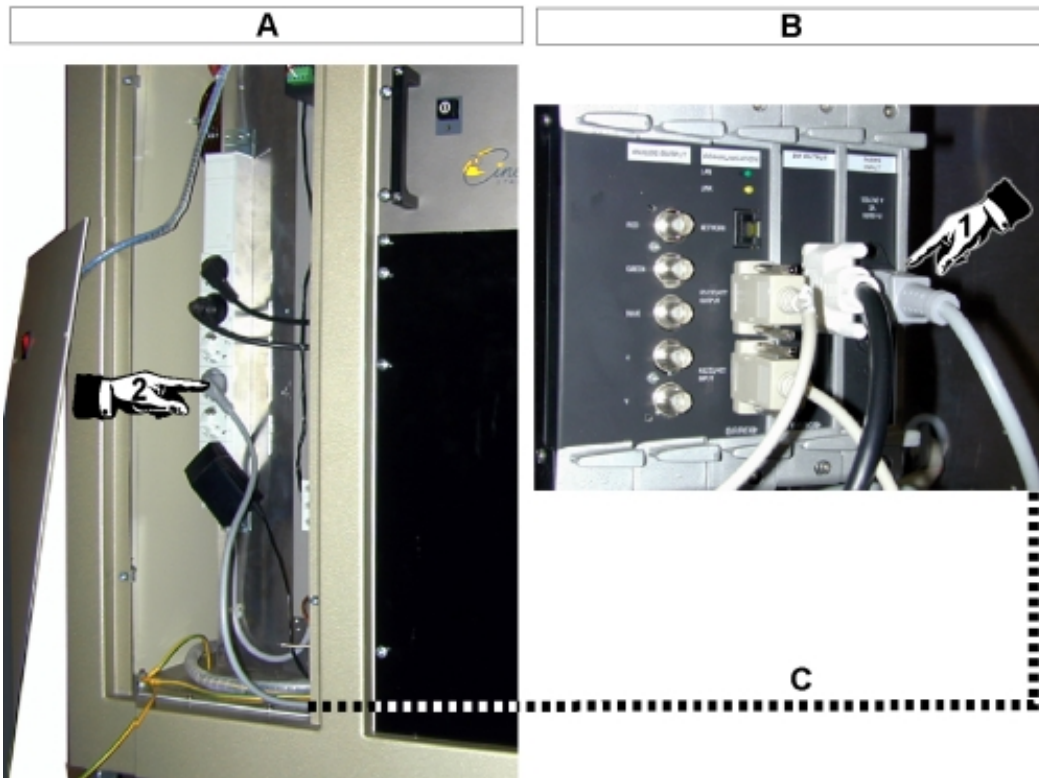
### Necessary parts

A RS232 communication, a DVI link and a power cable (type CEE C13), added to the ACSAR unit.

### How to connect the ACSAR unit to the console

- Plug the female connector (1) of the power cord (CEE C13 2M5) (C) into the male connector on the power input board of the ACSAR. Make sure that the power cord plug is firmly inserted into the AC socket. (image 5-6)
- Plug the male connector (2) into a free AC socket on the outlet strip in the console.
- Interrupt, in the exiting connection, the control link between Touch panel and Digital Head by pulling out D-9 plug (1) on Touch panel interface board and reinserting it in the RS232 OUT socket (2) on the communication module of the ACSAR (Link B). (image 5-7)
- Install communication link (A) between RS232 IN (3) on the communication module of the ACSAR and the interface board (1) of the Touch panel, using the added D9-D9 serial data cable (image 5-7).
- Install the DVI link (C) between DVI Output (6) on the communication module of the ACSAR and DVI Input (5) on the input panel of the Digital Head, using the added DVI cable (image 5-7).  
**Note:** The DVI cable has to be routed through the cable hole in front of the console.
- Reinstall the removed covers before operation the D-Cine projector.

## 5. Mounting the ACSAR into the Console



Installation of the DVI link and the RS232 communication

## 6. SIGNAL CONNECTIONS

### Overview

- Connections for Preview and Communications
- Connection to Video Equipment

### 6.1 Connections for Preview and Communications

#### 6.1.1 Connections for Preview

##### Connections for preview Monitors

The 5 BNC's on the output module carry the RGB Analog Video output signal with Separate Sync (H & V) for preview monitors matching the output timings. The supplied RGB Analog video signal has the same resolution as the digital video output.

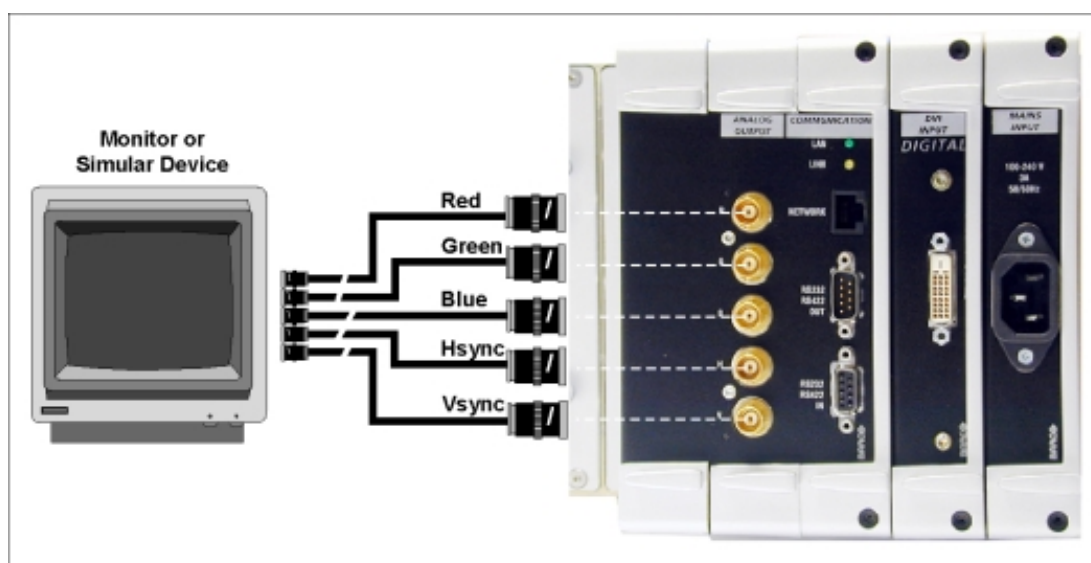


Image 6-1  
Preview Monitor connection

##### Analog Output Timings

Vertical Sync	Pal	NTSC	PC/no signal
Period	20 msec	16.7 msec	16.7 msec
Sync Width	63.7 $\mu$ sec	63.7 $\mu$ sec	63.7 $\mu$ sec
Back Porch	63.7 $\mu$ sec	63.7 $\mu$ sec	63.7 $\mu$ sec
Front Porch	3.6 msec	237 msec	237 msec
Active Signal	16.3 msec	16.3 msec	16.3 msec

Horizontal Sync	Pal	NTSC	PC/no signal
Period	15.9 $\mu$ sec	15.9 $\mu$ sec	15.9 $\mu$ sec
Sync Width	0.40 $\mu$ sec	0.4 $\mu$ sec	0.4 $\mu$ sec
Back Porch	2.48 $\mu$ sec	2.48 $\mu$ sec	2.48 $\mu$ sec
Front Porch	240 $\mu$ sec	240 nsec	240 nsec
Active Signal	12.8 $\mu$ sec	12.8 $\mu$ sec	12.8 $\mu$ sec

## 6. Signal Connections

- Back Porch = from rising edge of Sync to begin of active video.
- Front Porch = from end of active video to falling edge of Sync.

### 6.1.2 Connections or Communication

#### Purpose

The two D9 connectors RS422/RS232 In- and Output are defined as open standard for Communication with other Devices such as Control Panels (AMX, Creston™) and Audio Switchers).



Image 6-2  
RS232 Communication

RS232/422 IN		RS232/422 OUT		
Pin	Ref.	Pin	Ref.	Description
1	DCD_IN			Data Carry Detect
6	RXD+/DSR_IN	6	RXD+/DSR_OUT	Read Data/Data Set Ready
2	RXD-_IN	2	RXD-_OUT	Read Data
3	TXD-_IN	3	TXD-_OUT	Transmit Data
8	CTS_IN			Clear To Send
4	TXD+/DTR_IN	4	TXD+/DTR_OUT	Transmit Data/Data Terminal Ready
9	RI_IN			Ring Indicator
5/10	GROUND	5/10	GROUND	GROUND

### 6.1.3 Network Connections

#### Purpose

Controlling and monitoring of the ACSAR settings. Remote diagnostics to detect potential errors.





Image 6-3  
Network connection



Actually, this connection is not supported internally (Development status).

## 6.2 Connection to Video Equipment

### Overview

- Input Connection per Module
- Installation of an Input module

### General

The ACSAR is a powerful scaler and router designed to convert any incoming signal to the DVI digital output of the unit itself, linked on its turn to the DVI input of the D-Cine projection head. It can be equipped with up to 8 digital and analog input modules which enable it to process all types of video, component video, RGB, SDI, HD-SDI, DVI and any future video standardizing.



Image 6-4  
Input modules overview

- 1 RGB / YPrPb Input module
- 2 Video Input module
- 3 Video Input module
- 4 SDI Input module
- 5 HD SDI Input module
- 6-8 Free input slots (can be filled up with one of the above modules)

6.2.1 Input Connection per Module

Video Input module

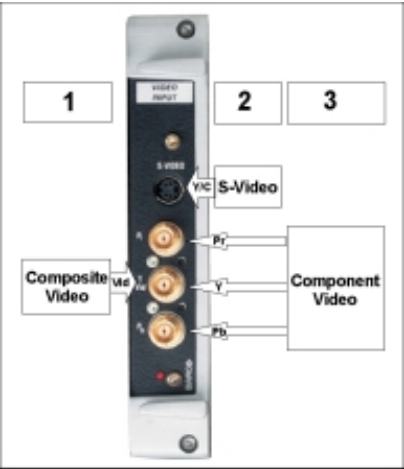


Image 6-5  
Video Input module

Input mode		Signal format (1), (2) or (3) selectable
Decoder		Digital Multistandard Decoder, running at twice the oversampling rate (27 MHz). - PAL, PAL M, PAL N - NTSC, NTSC M, NTSC Japan, NTSC 4.43 - SECAM
Comb Filter		Adaptive 2/4 line Comb Filter for two dimensional Y/C separation
Features		- Built in Copy-Protection detection - Automatic Gain and Clamping control
Input signal level		
	Video Input Mode	Composite Video signal 1.0Vpp
	S-Video Input Mode	Y+Synchro 1.0Vpp C burst level 0.286Vpp
	Component Input Mode	Y+Synchro 1.0Vpp Pr Pb

RGB/HV/YPrPb Input

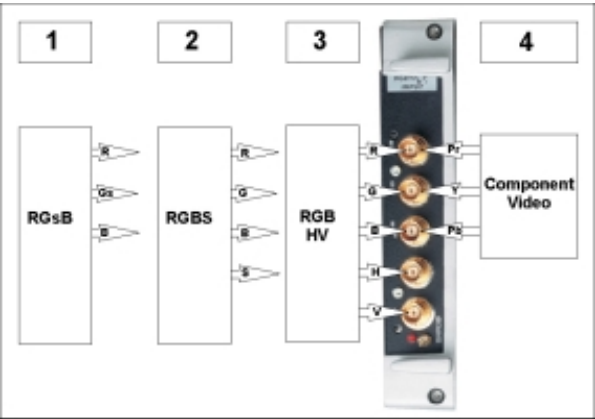


Image 6-6  
RGB/HV Input module



Input mode	Signal format (1), (2), (3) or (4) selectable on the GUI menu
Bandwidth	500 MHz RGB Analog Bandwidth convertor
Signal support	Supports signals up to 205 MHz Pixel clock (1600 x 1200 @ 75 Hz)
Sync Detection	Automatic Sync detection for: RGBHV, RGBS and RGsB.
Sync Polarity	Automatic Sync Polarity detection
Input signal level	
RGsB Input Mode	RGB signal: 0.7Vpp Composite Video Sync on G: 1Vpp
RGBS Input Mode	RGB signal: 0.7Vpp Composite Video Sync on H: 1Vpp
RGB/HV Input Mode	RGB signal: 0.7Vpp Hs Sync signal: 0.7Vpp Vs Sync signal: 0.7Vpp
Component Input Mode	Y+Synchro: 1.0Vpp Pr Pb

### SDI Input

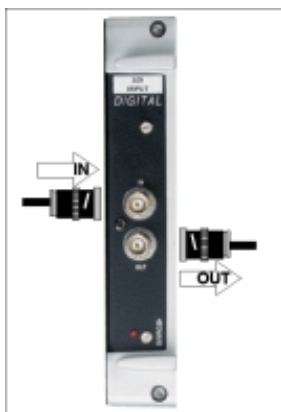


Image 6-7

Features	<ul style="list-style-type: none"> <li>- Loop through SDI Input (SDI in/SDI out)</li> <li>- For DVD players and other Video equipment with SDI out.</li> </ul>
----------	--

### HD SDI Input

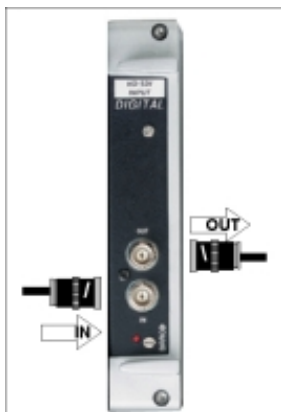


Image 6-8

Features	- Loop through HD-SDI Input (HD-SDI in/HD-SDI out) - For HD-DVD players and other HD Video equipment with HD-SDI out.
----------	--

Digital Visual Interface Input (DVI)



**DVI: Digital Visual Interface** is a display interface developed in repose to the proliferation of digital flat panels displays. It uses a high speed serial interface with **TMDS** (Transition Minimized differential signalling) to send data to the display. DVI can be single or dual link.

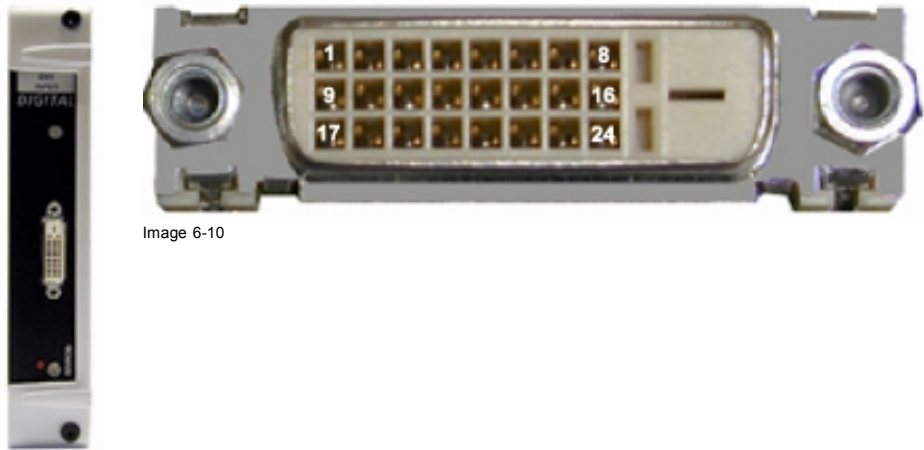


Image 6-10

Image 6-9  
DVI input module  
with DVI-D type  
connector

1	RX2-	7	SDA_PC	13	TMDS DATA 3-	19	RX0 Shield
2	RX2+	8	nc	14	+5V Host	20	TMDS DATA 5-
3	RX2 Shield	9	RX1-	15	GND	21	TMDS DATA 5+
4	TMDS DATA 4-	10	RX1+	16	Hot Plug Detect	22	TMDS Clock Shield
5	TMDS DATA 4+	11	RX1 Shield	17	RX0-	23	RXC+
6	SCL_PC	12	TMDS DATA 3-	18	RX0+	24	RXC-

6.2.2 Installation of an Input module

How to install an Input module

1. Has the new input module to be inserted in a free slot?  
If yes, go to step 2  
If no, go to step 3
2. Take away the dummy plate by removing the two securing screws (A) and continue with step 5. (image 6-11)
3. Unlock the module by loosening the rod screws (A). (image 6-12)
4. Carefully pull out the module (image 6-12).
5. Match the module plug with the slot connector and push the plug into the connector. (image 6-13)
6. Secure the module by tightening the rod screws (A)(image 6-13).

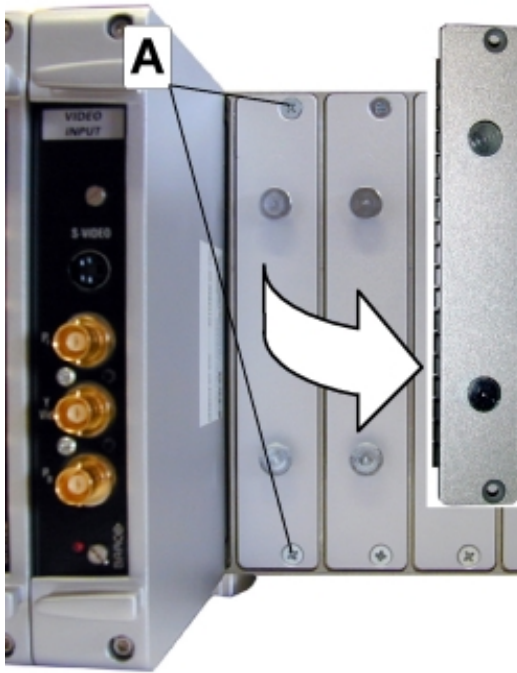


Image 6-11

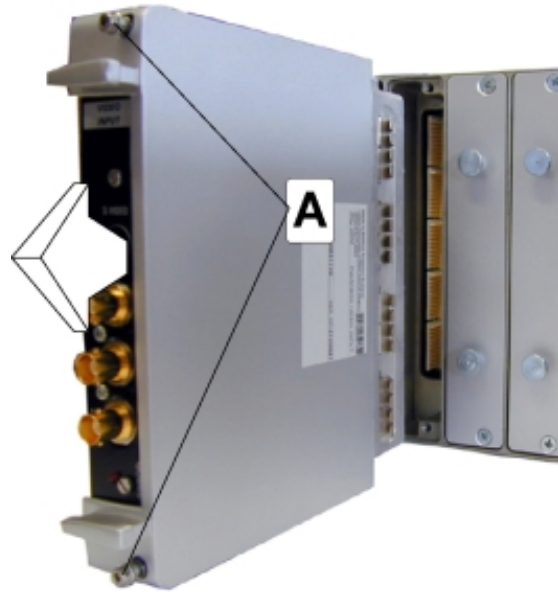


Image 6-12

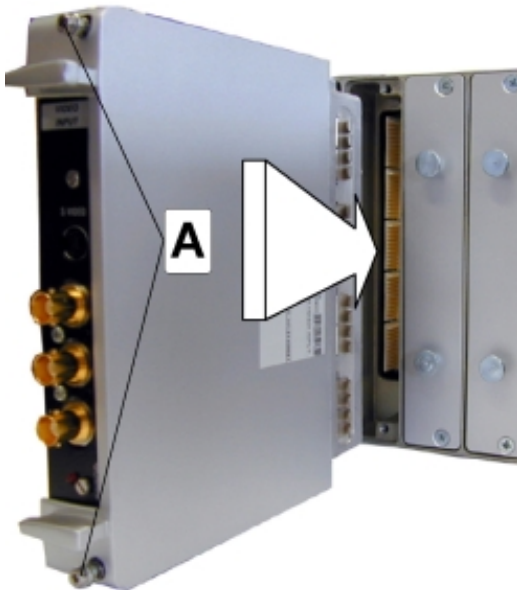


Image 6-13



## 7. LOCATIONS OF CONTROLS

### Overview

- On the ACSAR
- On the Remote Control

### 7.1 On the ACSAR

#### Front view

All controls for the ACSAR are provided on the front side.

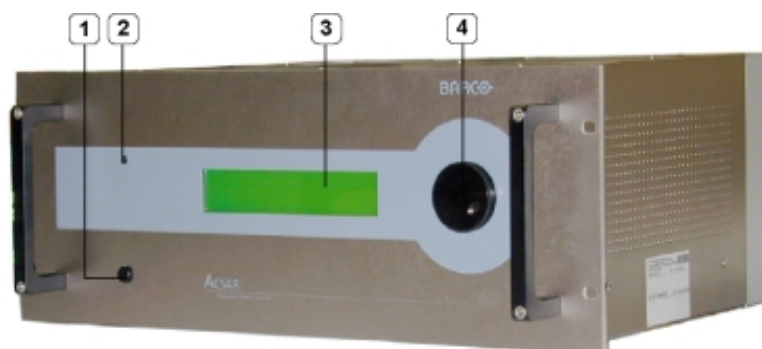


Image 7-1  
Location controls ACSAR

Controls function description

Ref.	Function	Description
1	Push button main power switch	Button pressed, switches the ACSAR in the standby mode.
2	Infra Red Receiver	Infra Red reception diode for the IR signals from the IR transmitter.
3	Black Dot Matrix display with green LED backlighting	This display indicates the status of the ACSAR and also the items when navigating through the different menu's.
4	Start up and Random access adjustment mode selection knob	All source parameters and picture tuning are setup in the adjustment mode.

## 7.2 On the Remote Control

### Top side

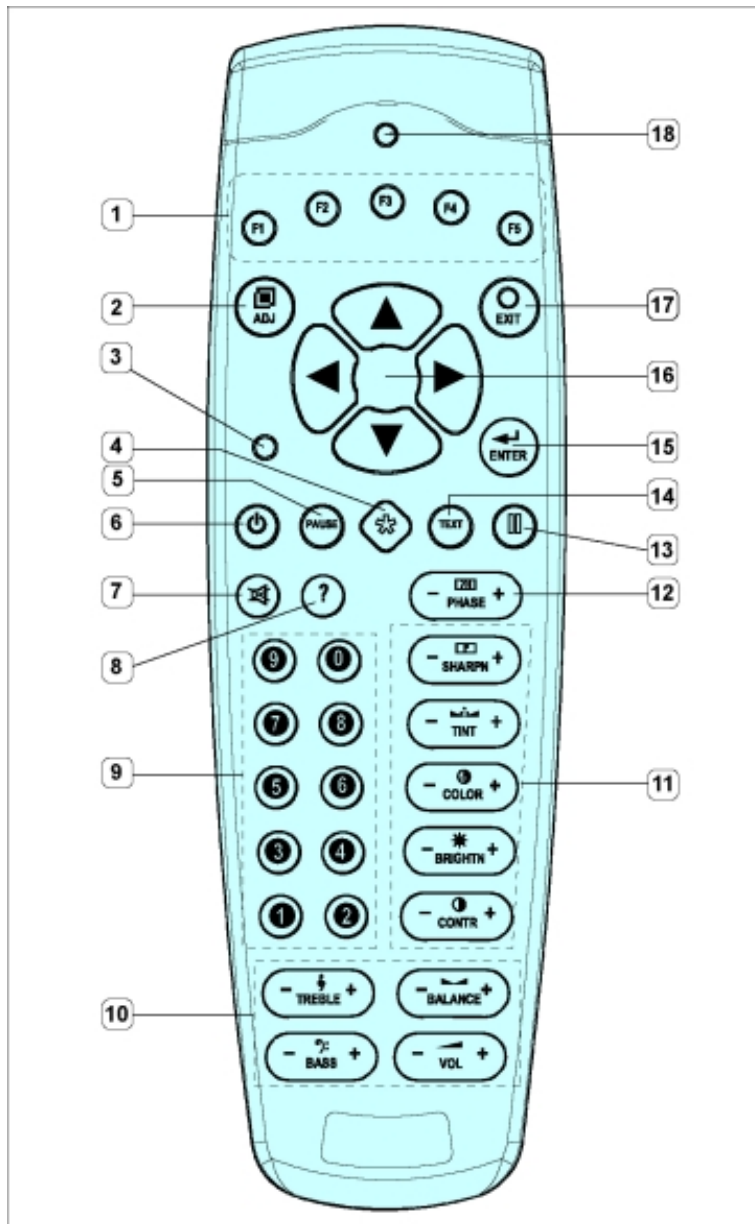


Image 7-2

#### Controls function description

Ref.	Function	Description
1	Function keys	User's programmable keys with functions for direct access.
2	ADJ (Adjust key)	Toggle key to enter or to exit the adjustment mode.
3	Address key	To match the address of the RCU with the ACSAR (number between 0 and 9).
4	Selection key	no use
5	PAUSE key	To stop projection for a short time, press ' <b>PAUSE</b> '. The image projection is interrupted but full power is retained for immediate restarting image projection.
6	Standby key	From a powered up ACSAR, pressing <b>StdBy</b> , switches the ACSAR into operation or back into standby mode.
7	MUTE	no use

Ref.	Function	Description
8	?	no use
9	Digit buttons	Allow direct input selection and address setting
10	Audio controls	no use
11	Picture controls	Allow to optimize the picture reproduction.
12	PHASE	Allow to remove image instability
13	FREEZE	Press to freeze the image
14	TEXT	Press to remove all on screen display when adjusting picture (Handy when adjusting picture during a meeting). Press key again for re-activation.
15	ENTER	Press to start the adjustment mode, confirm an adjustment or selection in the adjustment mode.
16	Cursor keys	Allow menu selections in the adjustment mode.
17	EXIT	Press to leave the adjustment mode via scrolling upwards in the menu structure.
18	RC operation indication	Lights up when a key on the remote control is pressed (Visual indication of remote control operation – Battery check).





## 8. OPERATING THE REMOTE CONTROL

### Overview

- Battery Insertion in the Remote Control
- Operating the Remote Control
- Address setting for the Remote Control

### 8.1 Battery Insertion in the Remote Control



– Insert batteries so that the plus (+) and minus (-) sides are aligned according to the markings in the battery case.

– Do not mix new batteries with used ones.

– The voltage of batteries may differ even if they are the same shape. Please do not mix different kinds of batteries.

– When not using the remote control unit for a long period of time (1 month or more), remove the batteries from the remote control unit to prevent leaking of battery fluid. If battery liquid has leaked, thoroughly wipe the inside of the case until all liquid is removed, and then insert new batteries.

– Do not charge, short, disassemble or throw the provided batteries in a fire.



When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country.

### Where to find the batteries

The batteries are not placed in the remote control to avoid remote control operation in its package, resulting in a shorter battery life time.

The batteries are packed separately and added to the package of the remote control.

### How to install the batteries

1. Push the cover tab (A) with the fingernail a little backwards and pull upwards the cover top (B). (image 8-1)
2. Slide the cover forwards to remove. (image 8-2)
3. Push the battery body towards the spring and lift it up to remove. (image 8-3)
4. Insert two AA size batteries, making sure the polarities match the + and – marks inside the battery compartment (image 8-3).
5. Insert the lower tab of the battery cover in the gap at the bottom of the remote control, and press the cover until it clicks in place (image 8-3).



Image 8-1  
Battery cover unlock



Image 8-2  
Battery cover removal



Image 8-3  
Battery removal

## 8.2 Operating the Remote Control

---

### Remote Control operation

This remote control includes a battery powered infrared transmitter which allows the user to control the ACSAR remotely via its own built-in infrared receiver.



**If backlight and RC operation indicator lights up too long or continuously, batteries need to be replaced.**

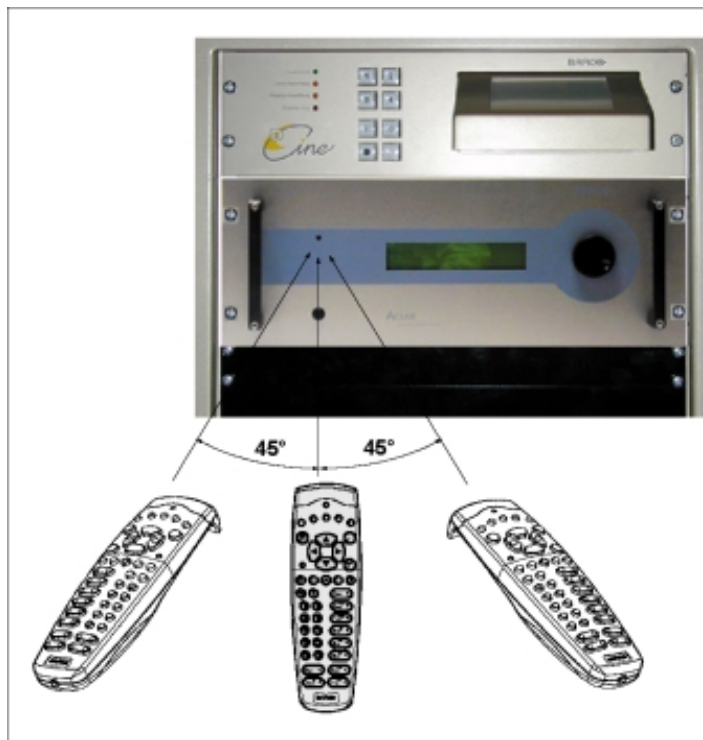


Image 8-4  
Remote control operation angle

When operating the remote control unit, point it at the remote sensor, located on the front side of the ACSAR. The remote control unit is operable up to 9 m from the unit and within a 45 angle on each side of the sensor.

When a key on the remote control is pressed, backlight is activated automatically. That allows the user to operate the remote control in a dark room. Backlight is turned off automatically a few seconds after the last key activation.

### Remote control operation's difficulties

- The remote control unit may not operate if there are objects placed between it and the display.
- Operational distances will gradually become shorter as the batteries begin to wear out, replace weak batteries with new ones as soon as possible.

### 8.3 Address setting for the Remote Control

#### How to set the Remote Control address

1. Point the Remote Control to the module you desire to know the address and press the address key (recessed key).

On-screen and in the graphical display appears the number of the address. Now proceed to program the address in the Remote Control.

2. Again, press the ADDRESS key on the Remote Control. (image 8-5)
3. Press the digit key, corresponding with the desired address (between 0 and 9), WITHIN 5 SECONDS after the key has been pressed. (image 8-6)

The commands from the Remote Control are sent with the stored address.

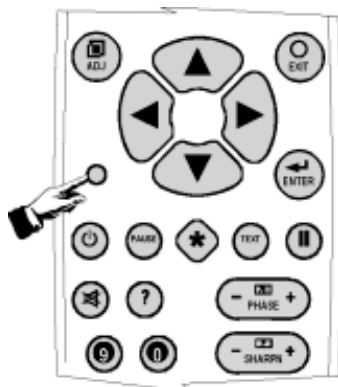


Image 8-5  
Address key

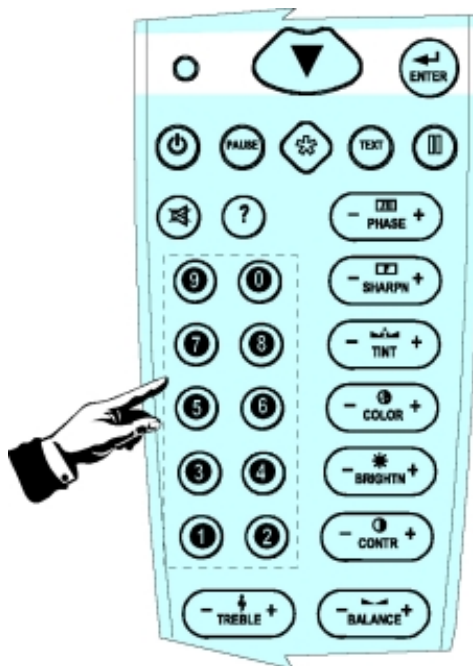


Image 8-6  
Digit keys



## 9. STARTING UP THE ACSAR

### Overview

- Starting Up the ACSAR
- Powering Down the ACSAR

### 9.1 Starting Up the ACSAR

#### How Starting Up the ACSAR

Starting up the ACSAR, after its own power switch button (1) has been pressed, can be performed by:

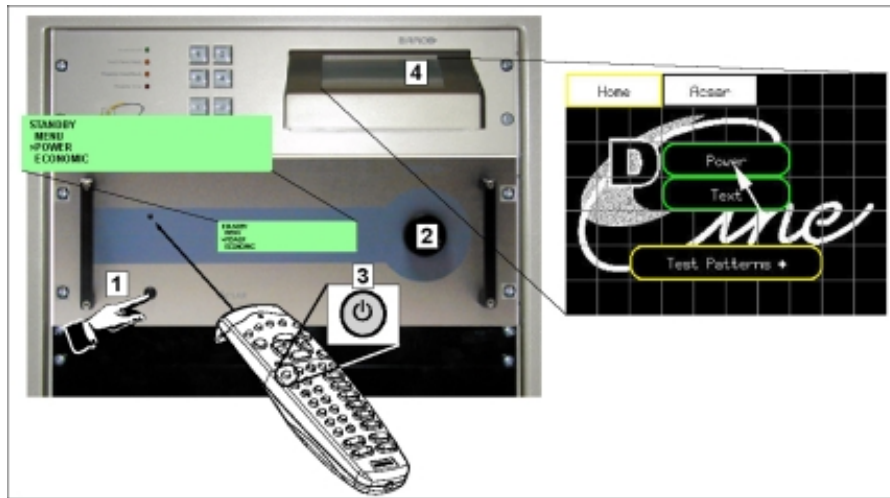


Image 9-1  
Starting up the ACSAR

- Pressing the selection wheel on the ACSAR (2) in the standby mode (Item POWER is pointed in the graphical display).
- Pressing STBY button on the Remote Control (3).
- Pressing POWER in the ACSAR menu (4), displayed on the touch panel when consecutively HOME and ACSAR touch button have been touched.

The ACSAR always starts up on the last selected source, whose file be displayed in the graphical display.

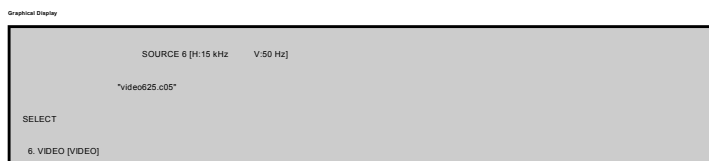


Image 9-2

### 9.2 Powering Down the ACSAR

#### Intro Powering Down

Powering down the ACSAR means switching the unit from operation mode into standby mode. To reduce power dissipation, if the unit stays unused for a period and quick restart is required, the unit can be switched into the Economic mode.

Switching the unit into the standby mode can be performed as follows (image 9-1):

- Rotate the selection wheel (2) until item STBY appears in the graphical display and press selection wheel (2) to confirm.
- Press the STBY button on the Remote Control for a few seconds (3).
- Press POWER in the ACSAR menu (4) on the touch panel.
- From the Standby mode menu, rotate the selection wheel (2) until item ECONOMIC appears in the graphical display and press selection wheel (2) to confirm.



**Switching the ACSAR into the Economic mode is only possible with the selection wheel.**

---

### Switching to Standby/Economic with selection wheel

1. Rotate selection wheel until item *STANDBY* appears in the select menu. (image 9-3)

2. Press the selection wheel to confirm.

The unit switches into the standby mode and the standby menu appears in the graphical display. (image 9-4)

3. Rotate the selection wheel until item *ECONOMIC* is pointed and press wheel to confirm.

The unit switches into the economic mode which results in a lower dissipation of the unit inclusive turning off backlighting of the graphical display. (image 9-5)

Press selection wheel again to return to Standby menu (image 9-4).

Graphical Display

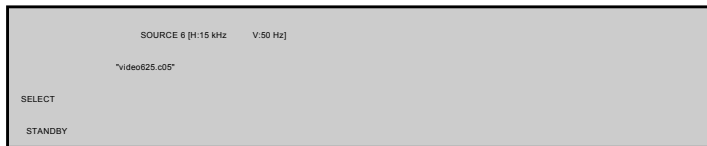


Image 9-3  
Select menu

Graphical Display



Image 9-4  
Standby menu

Graphical Display



Image 9-5  
Economic mode

### Switching to Standby with the Remote Control

1. Press the STBY button on the Remote Control for a few second

The unit switches into the standby mode and the standby menu appears in the graphical display (image 9-4).

2. Switching to the Economic mode, use selection wheel on ACSAR .

### Switching to Standby using Touch Panel

1. Press POWER in the ACSAR menu again on the touch panel.

The unit switches into the standby mode and the standby menu appears in the graphical display (image 9-4).

2. Switching to the Economic mode, use selection wheel on ACSAR .

## 10. WAY OF SCROLLING THROUGH THE MENUS

### 10.1 Way of displaying the Menus

#### How the menus are displayed?

The different adjustment items are structured in main and sub menus. On the ACSAR itself, the menus are displayed on a 4 line graphical display (display item per item) whereas on the projected picture a menu box appears, containing all menu items.



Image 10-1  
View main menu in Graphical display and OSD

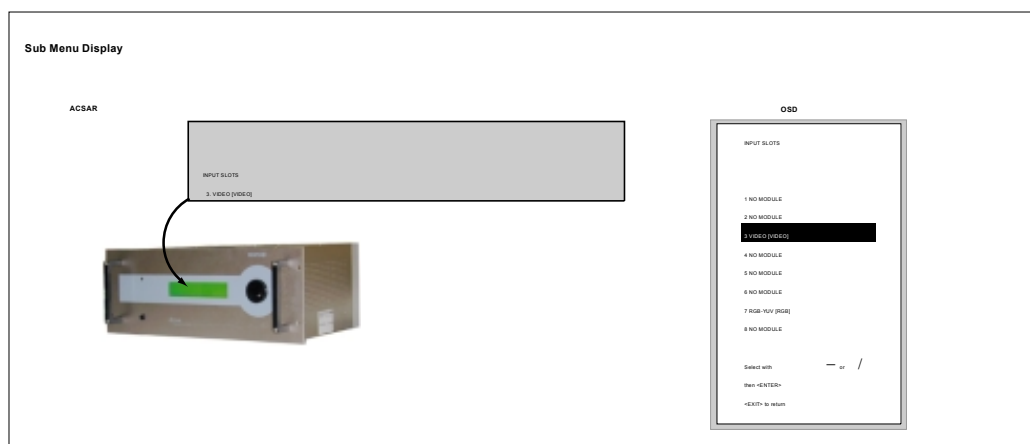


Image 10-2  
View sub menu in Graphical display and OSD

### 10.2 Way of scrolling through the menus

#### How to scroll through the menus?

Scrolling through the menus can be executed using the selection wheel on the ACSAR or the cursor keys on the Remote Control.

## 10. Way of Scrolling through the Menus

Selection wheel on ACSAR		
Rotating left or right	Main menu	The menu items rotate in front of the pointer in the graphical display. Pressing the selection wheel confirms the pointed selection.
	Sub menu	The sub items rotate one at the time below the sub menu title in the graphical display. Pressing the selection wheel confirms this specific sub item.
Pressing		Confirmation of the selection
To return		Select item 'RETURN' and press selection wheel

Remote control	
↑ or ↓ cursor key pressed	Runs through the items of the menu clockwise or counterclockwise. The selected item is highlighted
ENTER pressed	Confirmation of the selection
EXIT pressed	Returns one level back in the menu structure.

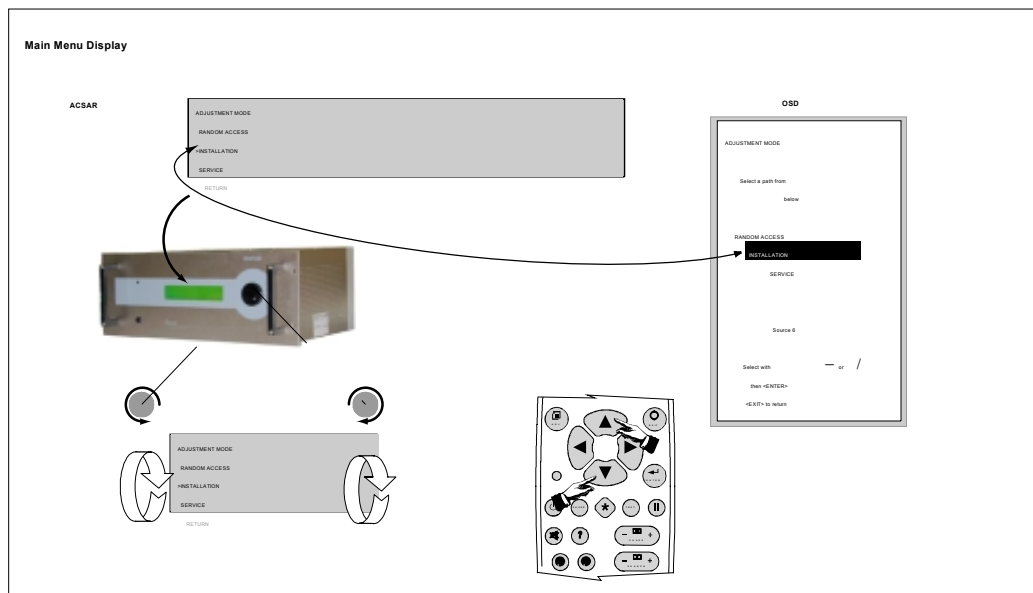


Image 10-3  
Scrolling through the main menus



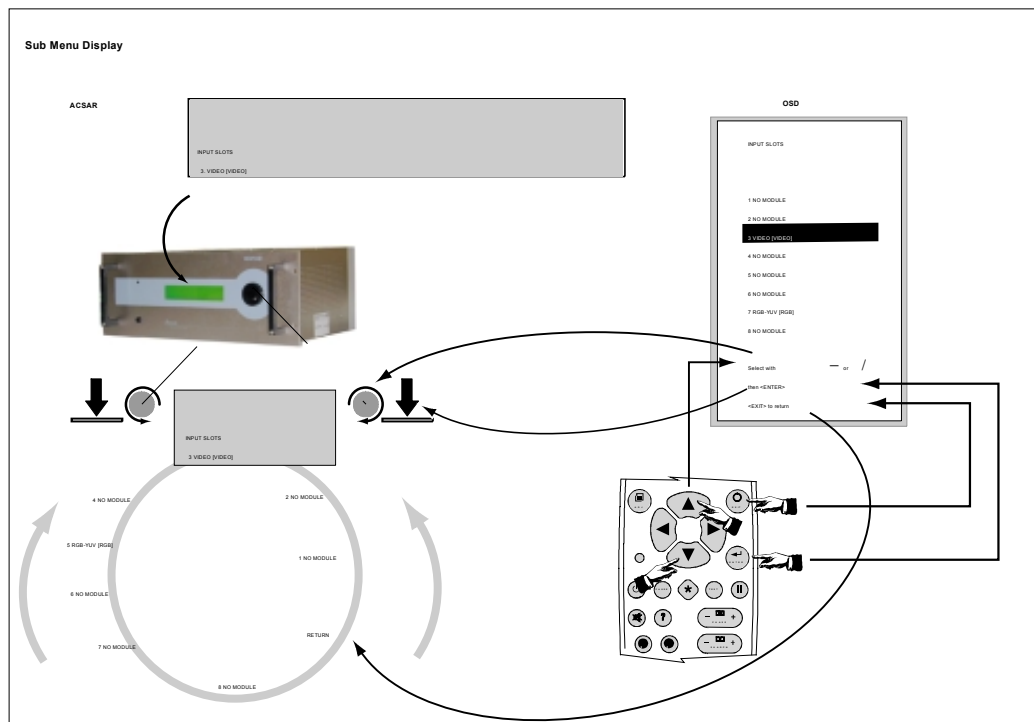


Image 10-4  
Scrolling through the sub menus



# 11. OVERVIEW GUI MENUS

## Overview

- ACSAR Starting up
- Adjustment mode Password protection
- Adjustment mode
- Entering the Adjustment mode

## 11.1 ACSAR Starting up

### Powering up sequence

The powering up sequence is displayed on the graphical display on the ACSAR only.

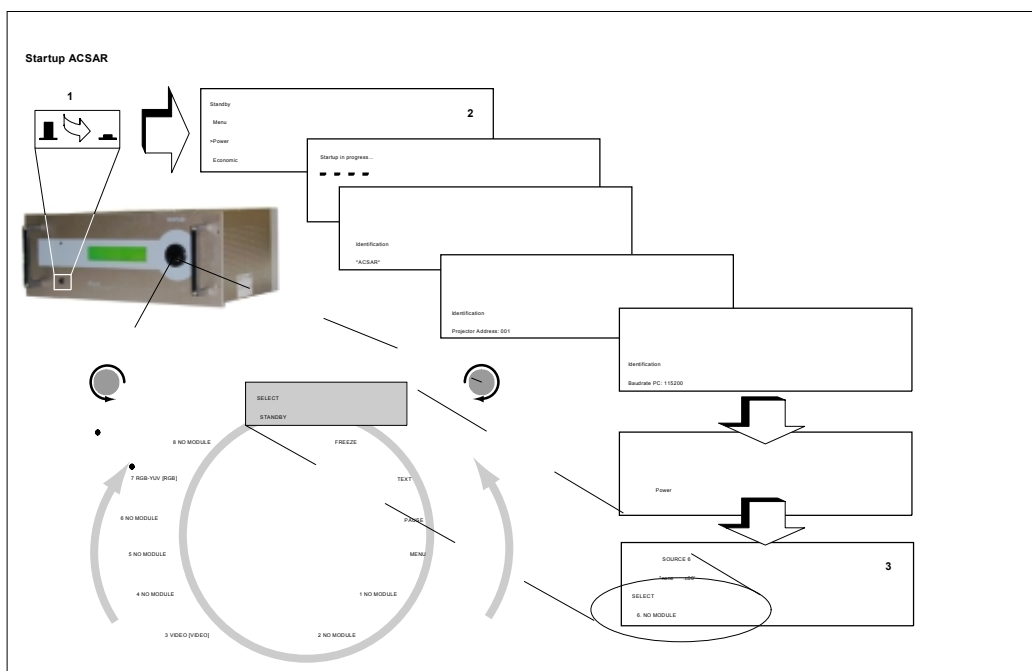


Image 11-1  
Powering up sequence using selection wheel on ACSAR

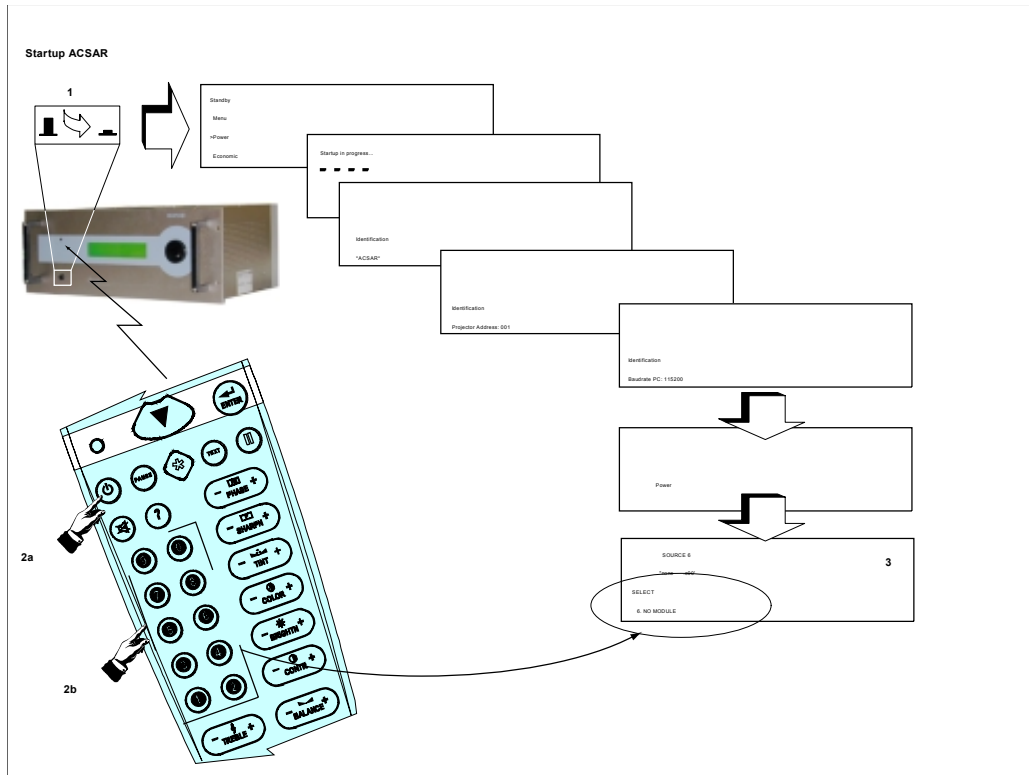


Image 11-2  
Powering up sequence using Remote control

## 11.2 Adjustment mode Password protection

### Password protection of some items

Some important menus or items are password protected. That means that, when trying to activate such an item the system ask to enter your unique password, being composed of 4 digits.



**Password protection yes or no is enabled or disabled by the position of a strap on the controller board (Refer to an authorized BARCO service center for advice).**

### How to enter your password

When a password protected item has been selected, a request for password entry appears on screen and in the graphical display with already the first digit activated for changing.

1. Enter the first digit of your password, using the digit buttons on the remote control or the selection wheel (rotating=changing digit, pressing=entering digit) (menu 11-1)

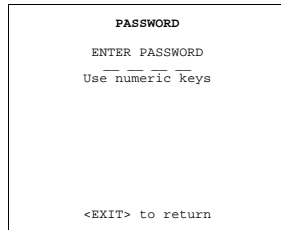
After entering the first digit, next digit is activated.

2. Apply the same procedure for the other 3 digits.

2 3 6 9

When the password entry is successful, the selected item or menu opens, otherwise an error message 'Invalid password' is displayed.

3. In case of an invalid password entry, press **EXIT** or press selection wheel to return.



Menu 11-1



Factory programmed password for Owner, User and Guest: 0 0 0 0

## 11.3 Adjustment mode



Menus appears on-screen and in the graphical display on the ACSAR. Only on-screen menus are disabled when the button TEXT on the remote control has been pressed.

### Entering the adjustment mode

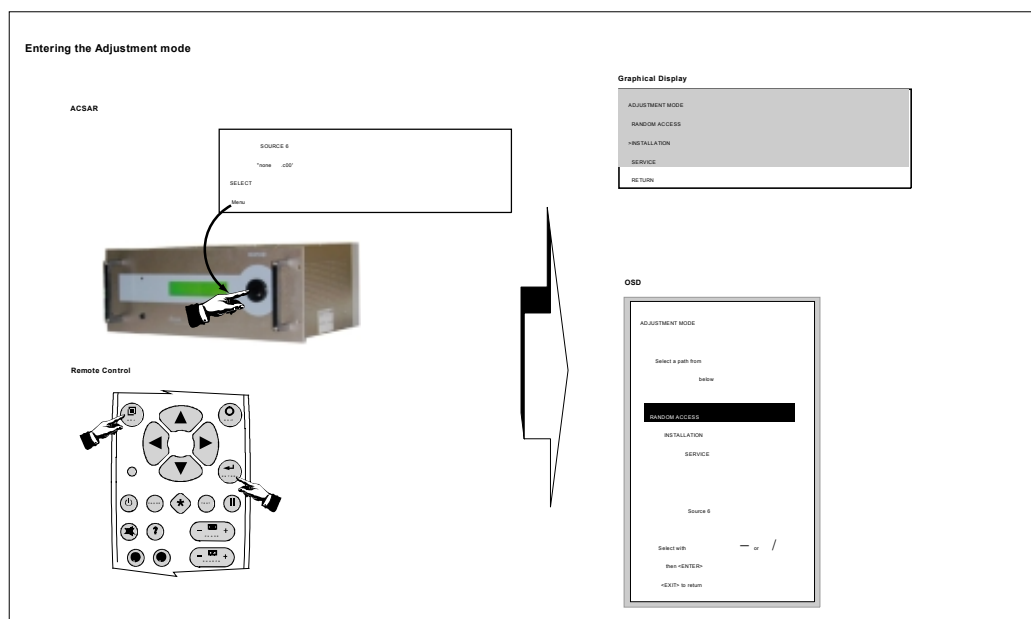


Image 11-3  
Entering the adjustment mode

## Random Access mode

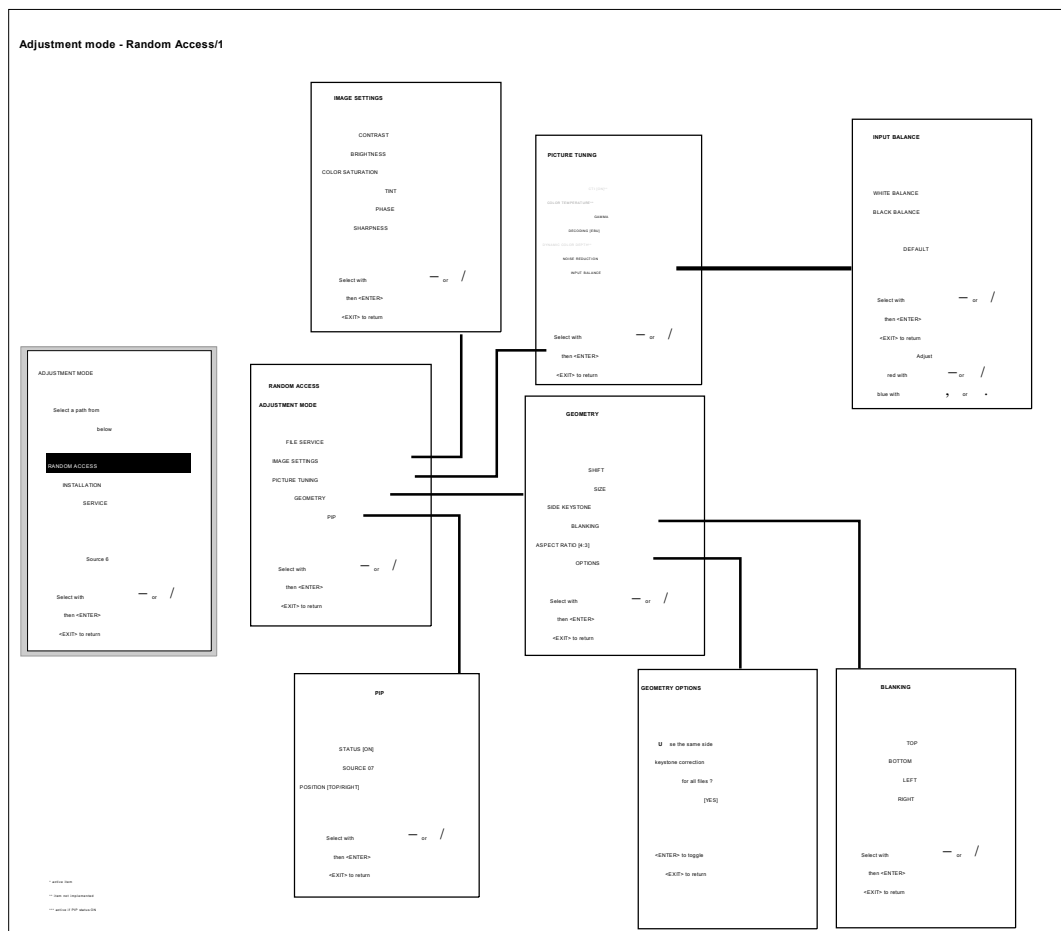


Image 11-4  
Random access mode, part 1 - On screen menu

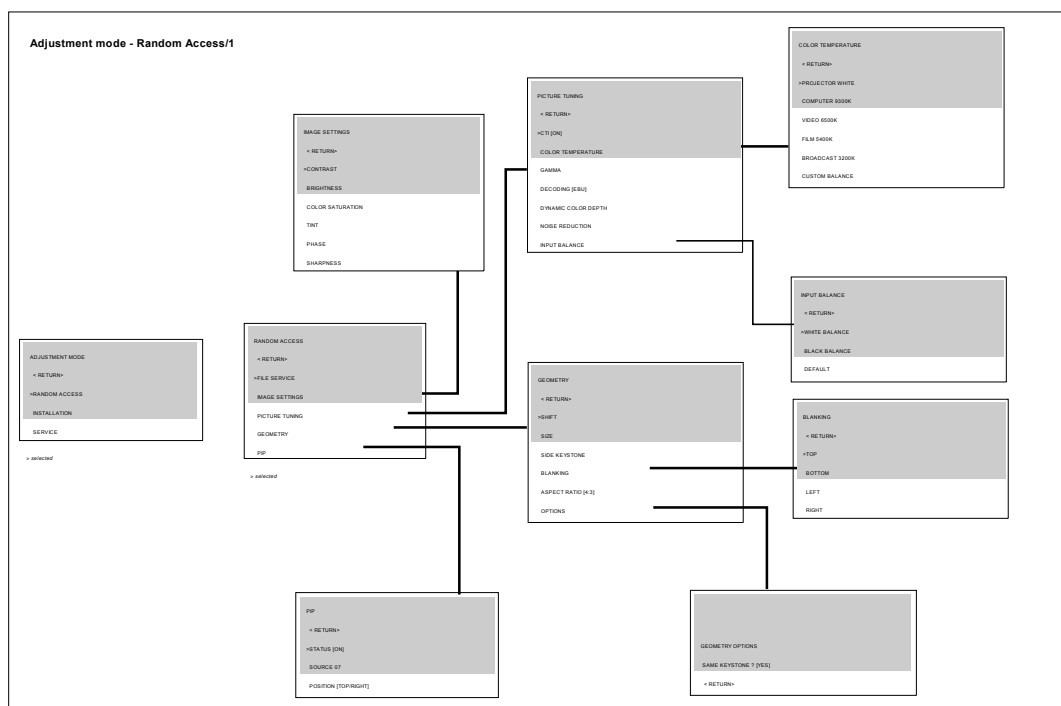


Image 11-5  
Random access mode, part 1 – Menu in Graphical display

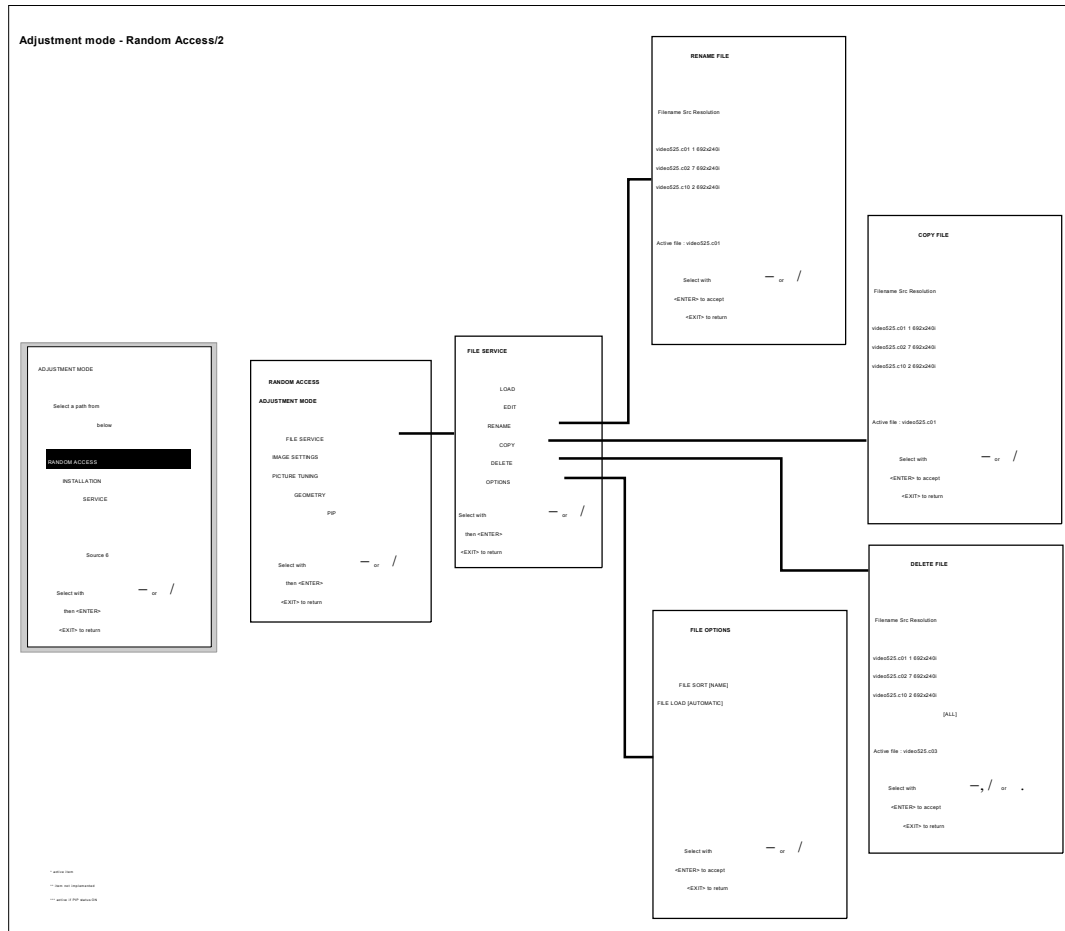


Image 11-6  
Random access mode, part 2 – On screen menu

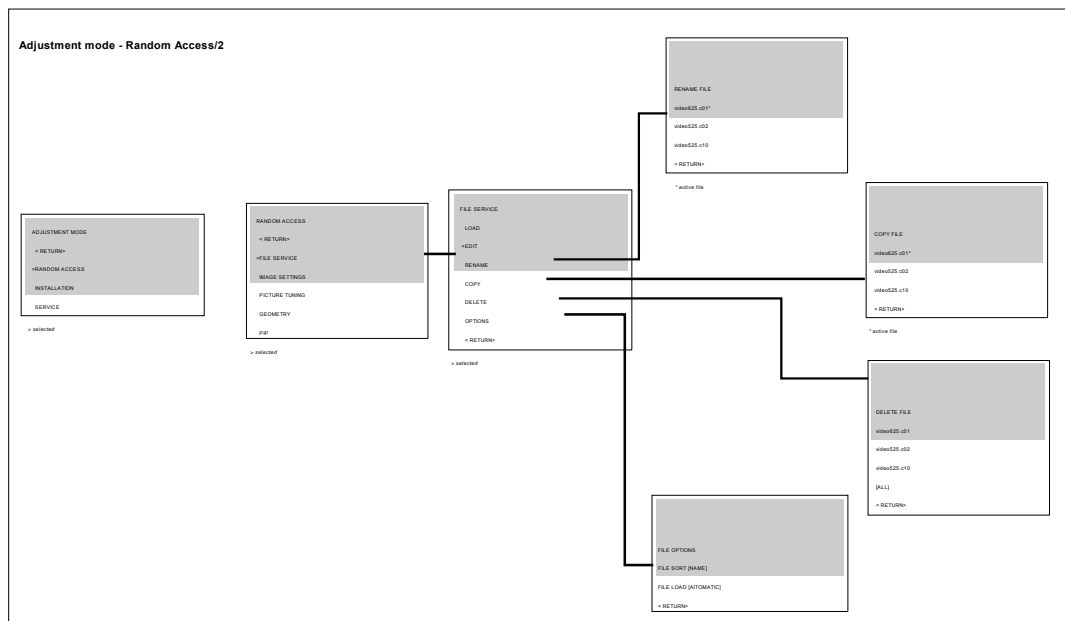


Image 11-7  
Random access mode, part 2– Menu in Graphical display

## 11. Overview GUI Menus

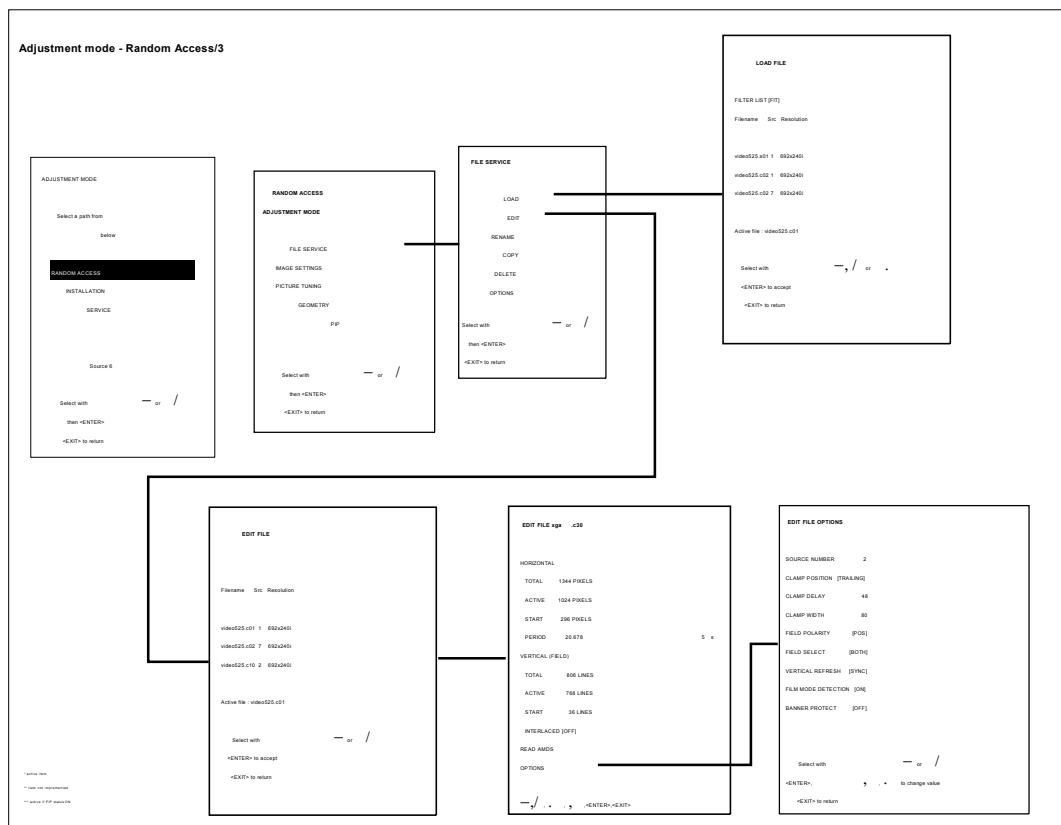


Image 11-8  
Random access, part 3 – On screen menu

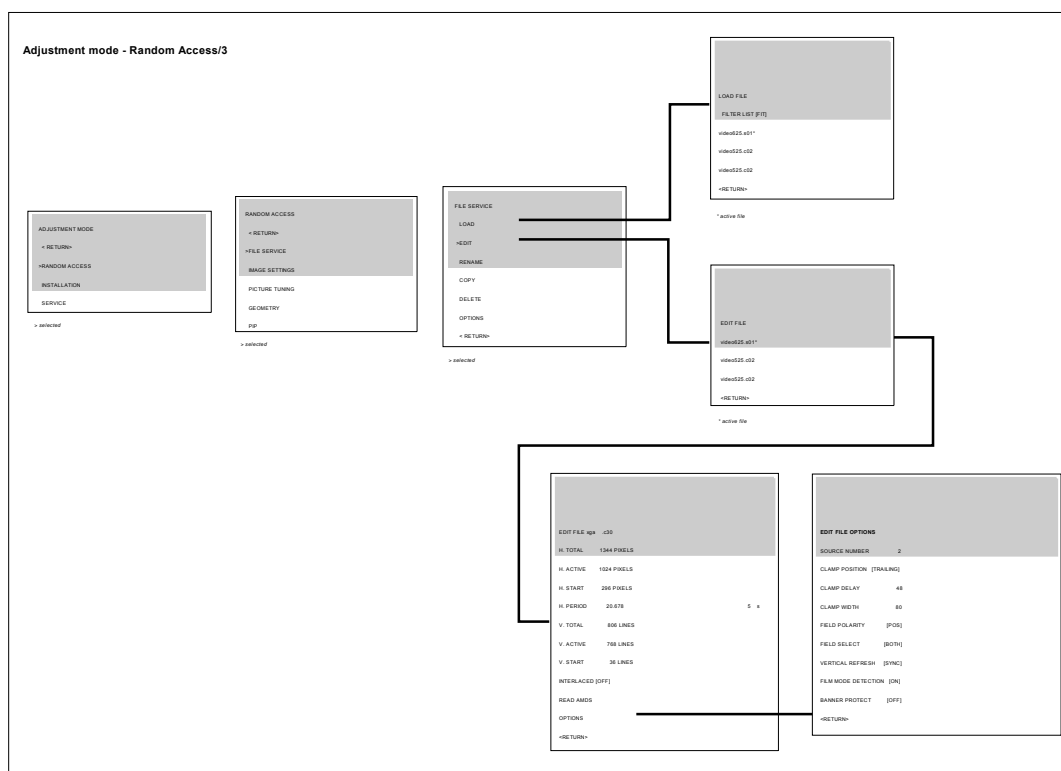


Image 11-9  
Random access mode, part 3– Menu in Graphical display



### Installation mode

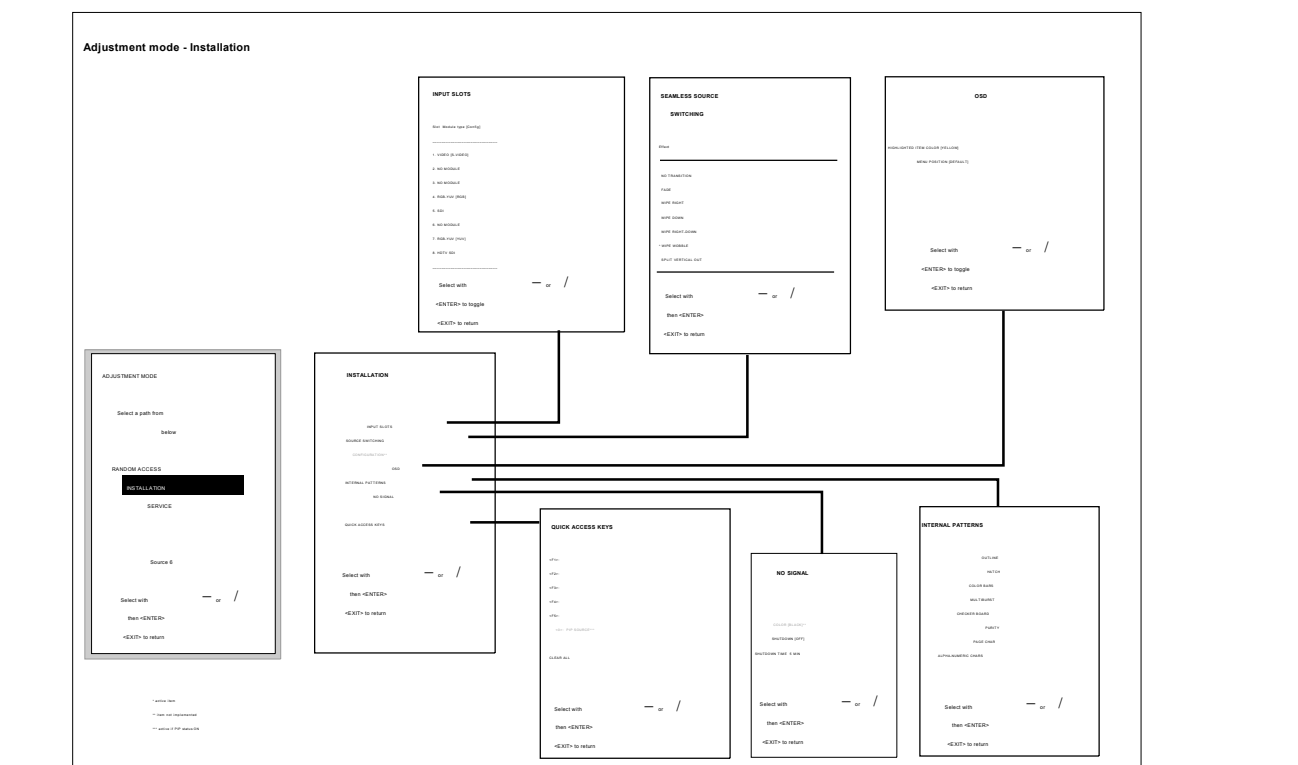


Image 11-10  
Installation mode – On screen menu

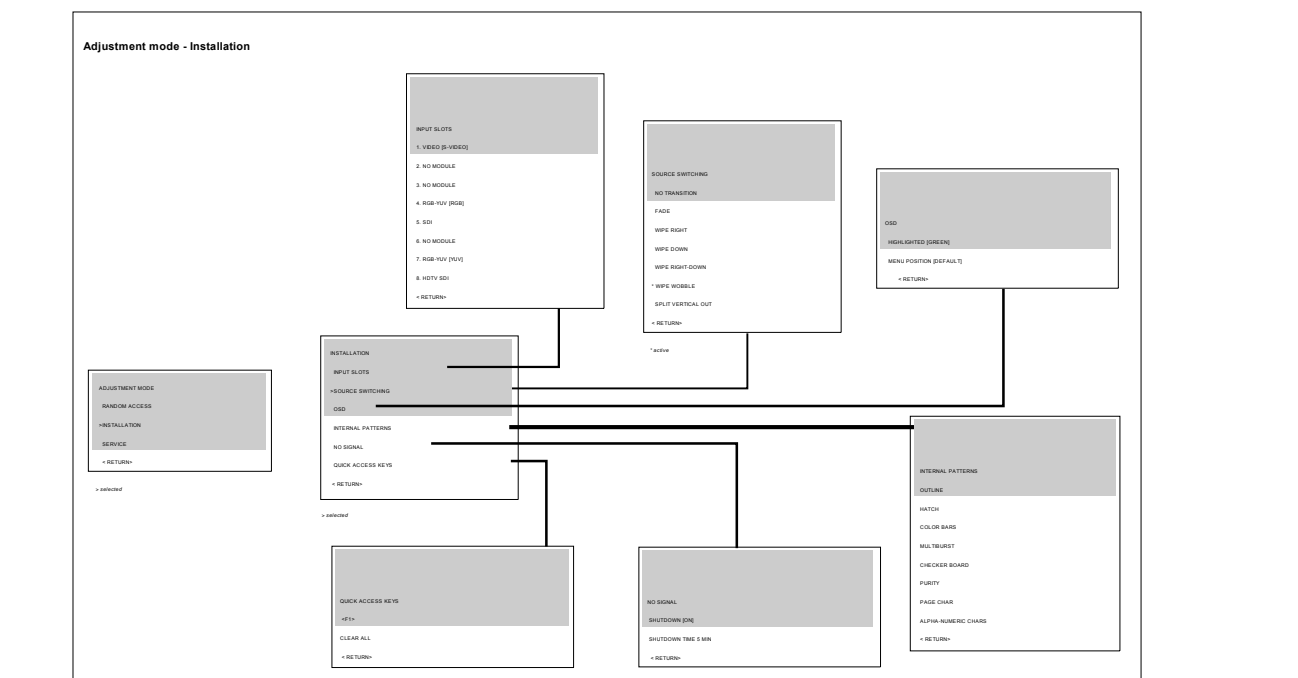
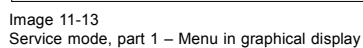
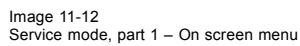


Image 11-11  
Installation mode – Menu in graphical display

R5976519 ACSAR 12122002



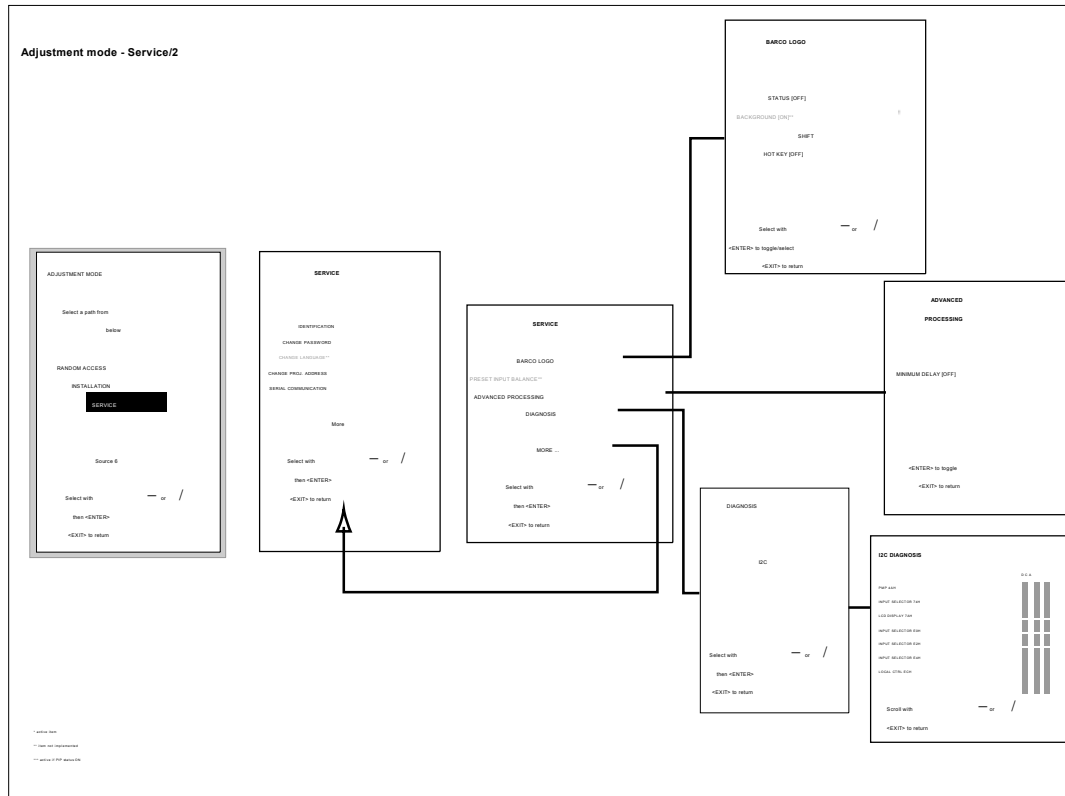


Image 11-14  
Service mode, part 2– On screen menu

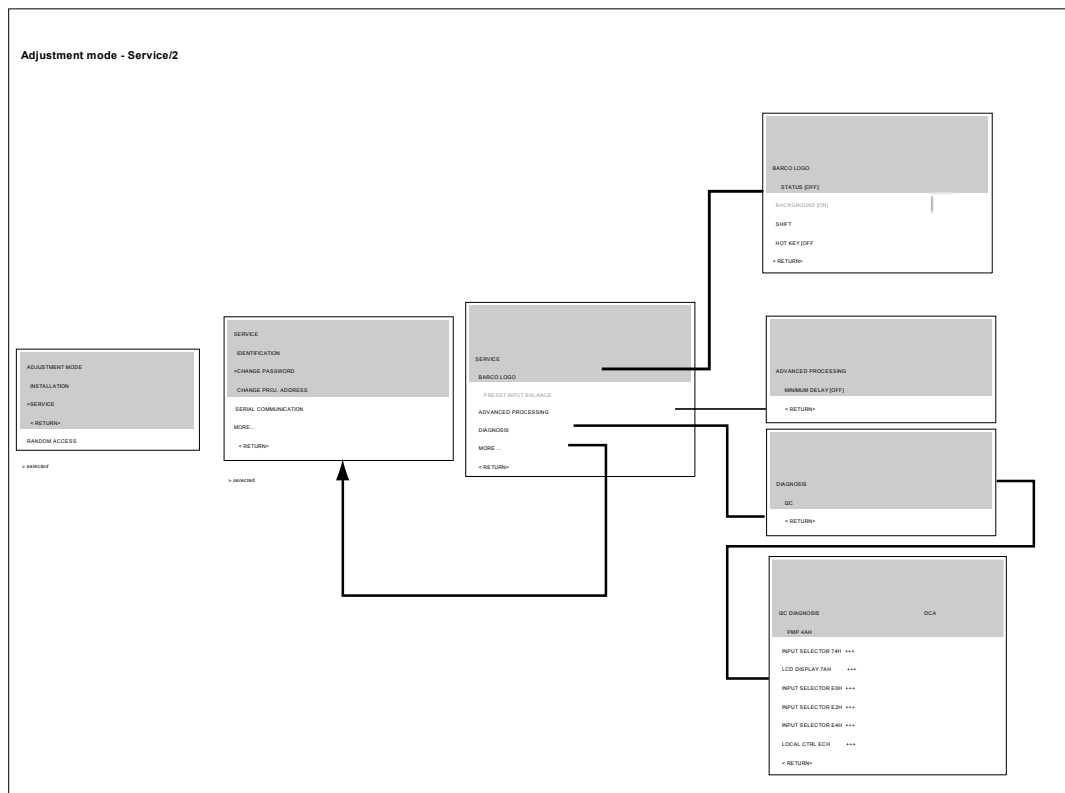


Image 11-15  
Service mode, part 2– Menu in graphical display

## 11.4 Entering the Adjustment mode

### How to enter/to leave the adjustment mode

Starting from the operation mode of the ACSAR, the adjustment mode can be entered using the selection wheel on the ACSAR or with its Remote Control, operating on the same IR address.

1. Rotate the selection wheel (1) until item MENU appears below the header 'Select' and press the wheel to confirm.  
Or,  
Press the **ADJ** or the **ENTER** key (2) on the Remote Control.

The main adjustment mode menu appears in the graphical display and On-screen. (image 11-16)

2. In the main menu, rotate the selection wheel until the desired item, Random Access-Installation or Service, suits the pointer and press the wheel to confirm.  
Or,  
Press the cursor keys ↑ or ↓ to highlight the desired mode and press ENTER to confirm.

The selected mode menu appears in the graphical display and On-screen.

3. To leave the adjustment mode, rotate the selection wheel until item RETURN suits the pointer in the graphical display and press the wheel to confirm.  
Or,  
Press **EXIT** key on the Remote Control

The system leaves the adjustment mode.

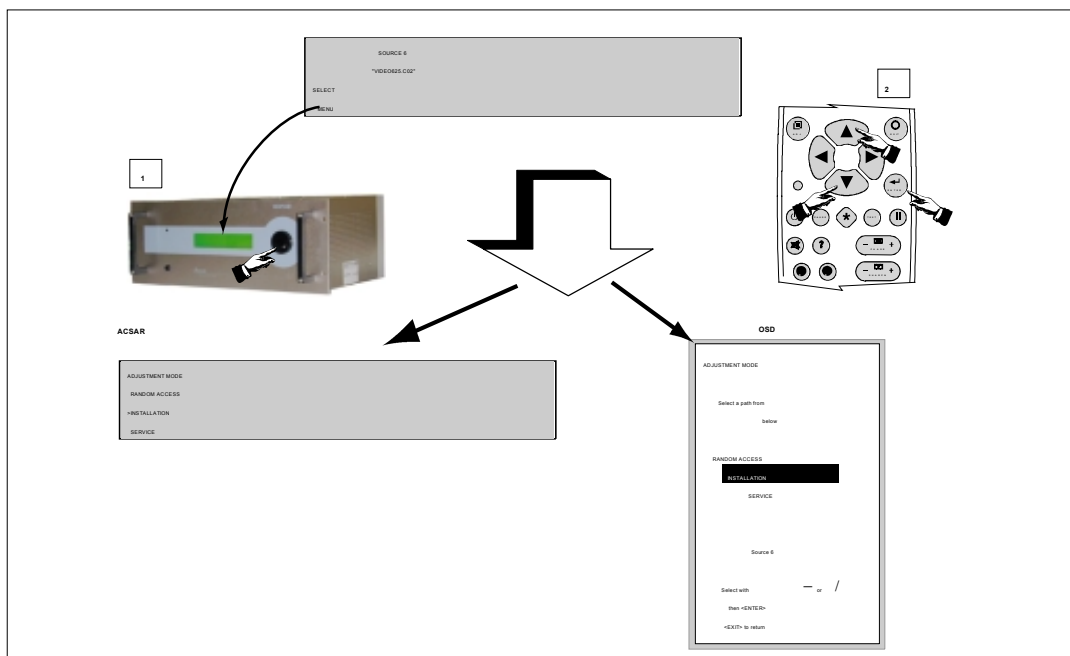


Image 11-16  
Entering the Adjustment mode

## 12. VIDEO/RGB INPUT MODULE SETTING

### 12.1 Set up Video and RGB input module

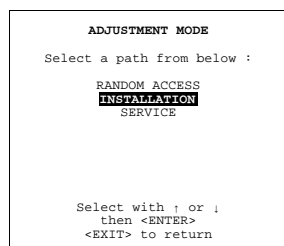
#### Set up Video and RGB input module for the input signal type

After the signal sources have been connected to the respective input modules, the input signal type for the Video and RGB input module has to be set up.

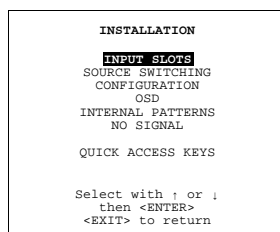
Input module	Signal type 1	Signal type 2	Signal type 3
Video	Composite Video	YUV (standard)	S-Video
RGB	RGB	YUV (progressive)	

#### How to set up the input module

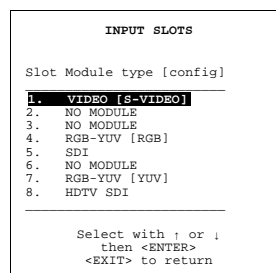
- From the adjustment mode menu, select item *INSTALLATION* (menu 12-1)  
The Installation menu appears on-screen and in the graphical display. (menu 12-2)
- From the Installation menu, select item *INPUT SLOTS*.  
The Input Slots menu appears on-screen and in the graphical display. The Input Slots menu contains a list of all plugged in modules preceded by the respective slot number. (menu 12-3)
- Select the input module on which the input mode has to be adapted to the input signal.
- Press the ENTER key or selection Wheel to toggle the desired input mode between brackets.
- Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 12-1



Menu 12-2



Menu 12-3



# 13. INPUT SOURCE FILE SERVICE

## Overview

- About Stored Files
- Loading a File
- File identification
- Editing a File
- Changing the parameter settings
- Rename a file
- Copy a File
- Delete a File from file list
- File Options (Sort and Load)

## 13.1 About Stored Files

### ACSAR memory

The ACSAR memory contains a list of files corresponding to the most used sources. When the ACSAR starts up (with active connected sources to the input modules), the input signals are scanned and compared with an already stored file. Mostly the result is a new custom file (linked to the input slot and e.g. differences in adjustments) for that input signal which is stored in the memory of the ACSAR. If the automatic created file needs small corrections, the Edit file option allows to adjust the file.

If no stored file corresponds to the specs of the scanned input signal, a most corresponding file can be loaded for that input signal and then further edited to match the specs of the input signal.

### How a file is coded

The stored file name includes 5 parts, e.g. bbbbbb.eee n pppxpppi

Part name	Description
bbbbbbb	Base name of the file (8 characters) e.g. vid625_c02
eee	File extension including: first character = C: custom made file first character = S: standard file second and third character: serial number (=file index) e.g. 05
n	Input slot number e.g. 3
pppxpppp	Active pixel format e.g. 692x285
i	blank: non interlaced file i: interlaced file

## 13.2 Loading a File

### How to enter the Load File menu:

1. From the adjustment mode menu, select item *RANDOM ACCESS*. (menu 13-1)

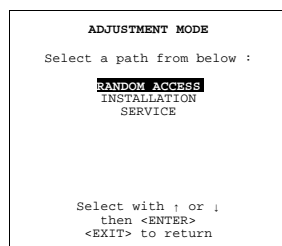
The Random Access adjustment mode menu appears on-screen and in the graphical display. (menu 13-2)

2. From the Random Access adjustment mode menu, select item *FILE SERVICE*.

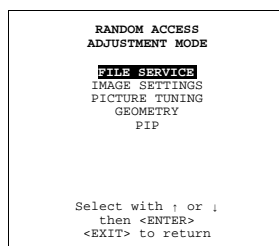
The File Service menu appears on-screen and in the graphical display. (menu 13-3)

3. From the File Service menu, select item *LOAD*.

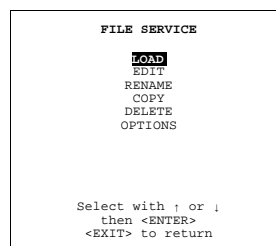
The Load File menu appears on-screen and in the graphical display. The Load File menu contains a list of corresponding files or all stored files depending the Filter list setting "*FIT*" or "*ALL*" (menu 13-4)



Menu 13-1



Menu 13-2



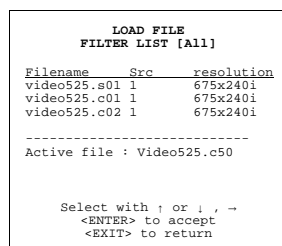
Menu 13-3



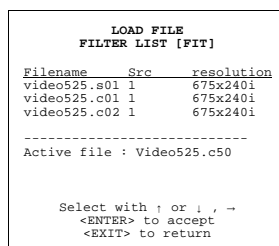
Menu 13-4

### How to change the filter setting

1. Select item *FILTER LIST* [XXX].
2. Press **ENTER** (RCU) or press selection wheel to toggle the annotation between brackets.
  - [ALL]: all available files that can be loaded will be displayed.
  - [FIT]: only the best fitting files will be displayed (with a distinction of  $\pm 2$  lines and line duration of  $\pm 300$ ns, if nothing is found within this small area, the ACSAR continues searching until it finds something). (menu 13-5)



Menu 13-5



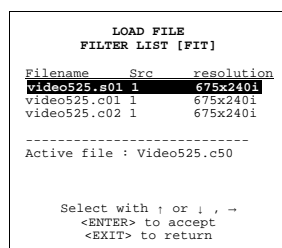
Menu 13-6

### How to load the file

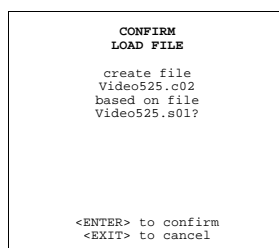
1. Select the best fitting file. (menu 13-7)
2. Press **ENTER** (RCU) or press selection wheel to confirm your file selection.

A confirm load file message will be displayed containing the created file and the file from which the new file has been derived. (menu 13-8)

3. Press **ENTER** (RCU) or press selection wheel to add your new file to the list of the customer files.



Menu 13-7



Menu 13-8





In the load file mode, the active file is indicated beside the item **Active File**.



When scrolling through the files, the image will be adapted according the file specifications of that selected file.

### The image display is not perfect

If the created file doesn't results in a perfect image, go to the file edit menu which allows to adapt some parameters (see further).

## 13.3 File identification

### How identifying the new selected source

When selecting the respective input slot with the new source, the horizontal period, the total number of vertical lines and the interlaced mode are automatically measured and filed in the menu table as a new custom file.



When editing a custom file, **NEVER** adjust the automatically measured values as they are used to identify the input source file when selecting.

### Explanation of the Edit file menu items

Menu Item	Explanation
Horizontal Total Pixels	If the value for 'Horizontal Total pixels' is wrong, sampling mistakes, small vertical bars will be seen in the image (Total numbers of pixels between 2 sync pulses is used to adjust the sampling rate). Select 'Total' and increase or decrease the pixel quantity for no bars in the image. (image 13-1)
Active pixels	The 'Active pixels' determine the width of the window on the screen. This value is normally given in the source specifications. If not, adjust until full image is displayed (no missing pixels). (image 13-1)
Horizontal start	This is the number of the pixels between the beginning of the input signal and the start of the video information in the signal. (image 13-1)
Horizontal Period	This is already filled in with the correct value at the time of the source identifying.
Vertical Total Lines	This is already filled in with the correct value at the time of the source identifying.
Active Lines	This is the number of horizontal lines determining the height of the projected image. This value is normally given in the specification of the source. If not, adjust until full image height is displayed (no missing lines).
Vertical Start	This is the number of the lines between the start of the input signal and the start of the image on the screen.
Interlaced [On] or [Off]	This selection is automatically filled at source identifying. If the image is wrong, due to wrong measurements, use the <b>ENTER</b> key to toggle between On and Off. (For interlaced images, 1 frame contains 2 fields).
Read AMDS	AMDS = Automatic Mode Detection & Synchronization Selecting AMDS and confirmed with <b>ENTER</b> , the system re-identify the input source.

### Explanation of the Edit file menu option items

Option Item	Explanation
Source Number	The source number of a non-active source can be changed to any other source number. This makes it possible to create a file for future source numbers.
Clamp Position	Clamping determines the back level of the signal. The clamp pulse can be related to the leading or the trailing edge of the synchro pulse. Use the <b>ENTER</b> key to toggle between Leading and Trailing. (image 13-2)

### 13. Input Source File Service

Option Item	Explanation
Clamp Delay	The time between the leading edge of the clamp pulse and the locked edge of the synchro pulse. Can be any value between 0 and 255. Change the value by pushing the curser key ↑ or ↓. (image 13-2)
Clamp Width	The width of the clamp pulse can be any value between 0 and 255. Change the value by pushing the curser key ↑ or ↓. image 13-2)
Field Polarity	The field polarity function is used for interlaced images. Both rasters of the image could be shifted in a wrong way (double lines are visible in the image). This can be corrected by forcing the field polarity to Neg. or Pos. Use the <b>ENTER</b> key to toggle between Pos. and Neg.
Field Select	Default setting = [Both]  The field select is only used for interlaced images. One frame of an interlaced image contains two fields, an even and an odd field. The choice exists to project [both] fields on the screen or only the [even] or [odd] field. This can be useful for 3D projection. Use the <b>ENTER</b> key to toggle between Both, Even and Odd.
Vertical Refresh	The way of updating the image information on the display panels. This item is not available for Pal-NTSC-Secam sources, and for that reason displayed in gray.  – For sources with a vertical frequency up to 60 Hz: the vertical refresh rate is the same as the vertical frequency of the source. This is a necessity to project moving images without 'motion artifacts'. For stationary images with a vertical frequency up to 60 Hz, it is still possible to use asynchronous refresh. When loading Pal, Secam or NTSC-files, the synchronous mode is default, for all other sources below 60 Hz, asynchronous mode is default.  - For sources with a vertical frequency higher than 60 Hz: the vertical refresh is different than the vertical frequency of the source. Synchronous refresh cannot be used.
Vertical Synchro Polarity	The vertical refresh can be synchronized with the leading or trailing sync edge. Default setting is [Leading]. Toggling to [Trailing] is only necessary for special applications where the trailing edge of the synchro signal has to be taken as a reference. Use the <b>ENTER</b> key to toggle between Leading and Trailing.
Film mode detection: [On] or [Off]	Detects in the [on] mode if the source is film or video. Use the <b>ENTER</b> key to toggle between [on] or [off]  When enabled, the hardware looks for telltale signs of 3:2 or 2:2 pull-down sequences. These are the result of converting cinema material recorded at 24 frames-per-second to the television frequencies of 60 or 50 interlaced fields per second respectively. When FILM conversion is detected, the original 24 frames-per-second are restored. This avoids de-interlacing artefacts, and results in a perfect artefact-free display. Note that in some cases (video clips, scrolling news stickers,...) FILM and VIDEO material are mixed on one screen. This may confuse the detector and cause it to go into FILM restoration mode. This will cause "jaggies" or motion artefacts. In such cases, disabling FILM mode processing is the best cure.
Banner Protect: [On] or [Off]	Only active when film mode detection is in the on position. Use the <b>ENTER</b> key to toggle between [on] or [off].  FILM mode processing normally processes the entire display, but this may cause problems on sources where video and FILM content are mixed. One very common example is scrolling banners at the bottom of the screen (e.g. financial news). For those cases, the "banner protect" feature will force the bottom quarter of the screen to be always processed in VIDEO mode, regardless of the rest of the screen, which may be either video or FILM mode.

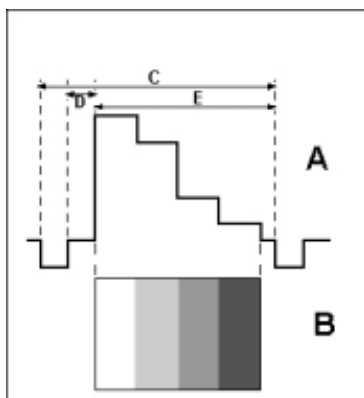


Image 13-1  
Video pixels

- A Video Signal
- B Image
- C Total Pixels
- D Start Pixels
- E Active Pixels

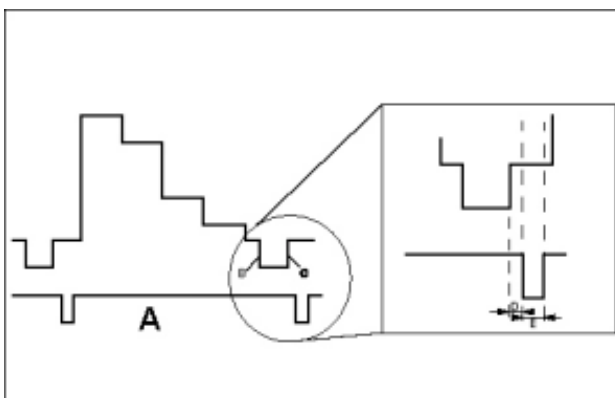


Image 13-2  
Video clamping

- A Clamp signal
- B Leading edge sync signal
- C Trailing edge sync signal
- D Clamp pulse delay
- E Clamp pulse width



### 3:2 pull-down

Method used to map the 24 fps of film onto the 30 fps (60 fields) or 25 fps (50 fields), so that one film frame occupies three video fields, the next two, etc. It means the two fields of every other video frame come from different film frames making operations such as rotoscoping impossible, and requiring care in editing. Some sophisticated equipment can unravel the 3:2 sequence to allow frame-by-frame treatment and subsequently re-compose 3:2. The 3:2 sequence repeats every five video frames and four film frames, the latter identified as A-D. Only film frame A is fully on a video frame and so exists at one time code only, making it the editable point of the video sequence.



### 2:2 pull-down

The process of transferring 24-frames/sec film format into video by repeating each frame as two video fields. ( AD )



### Artefacts

Undesirable elements or defects in a video picture. These may occur naturally in the video process and must be eliminated in order to achieve a high-quality picture. Most common in analog are cross color and cross luminance. Most common in digital are macroblocks, which resemble pixelation of the video image.

## 13.4 Editing a File

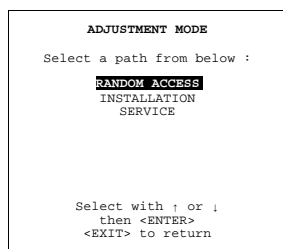
### How to enter the Edit File menu:

1. From the adjustment mode menu, select item *RANDOM ACCESS*. (menu 13-9)  
The Random Access adjustment menu appears on-screen and in the graphical display. (menu 13-10)
2. From the Random Access adjustment mode menu, select item *FILE SERVICE*.  
The File Service menu appears on-screen and in the graphical display. (menu 13-11)
3. From the File Service menu, select item *EDIT*.  
The Edit File menu appears on-screen and in the graphical display. The Edit File menu contains a list of all stored files with on top of the list the active file (mostly to be edited). (menu 13-12)
4. Select the file which has to be edited.
5. Press **ENTER** (RCU) or the selection wheel to confirm.  
The Edit File menu for that specific file appears on-screen and in the graphical display showing all the file parameters which can be changed. The file parameters are spread out over two menus, linked via item *OPTION*.  
Parameters which are not adjustable are displayed light grey in the menu. (menu 13-13)

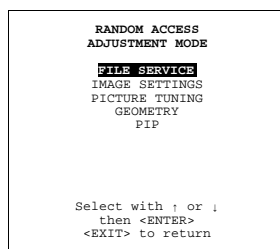
## 13. Input Source File Service

- From the Edit file menu, select item *OPTIONS*. ()
- Press **ENTER** (RCU) or the selection wheel to confirm.

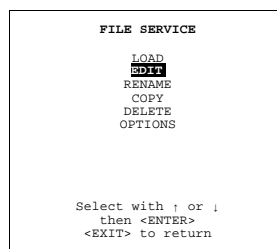
The Edit File Options menu for that specific file appears on-screen and in the graphical display showing all the file parameters which can be changed. (menu 13-14)



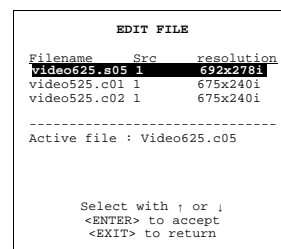
Menu 13-9



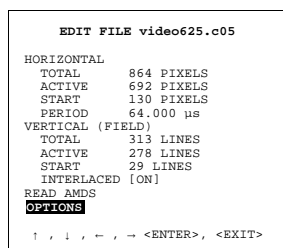
Menu 13-10



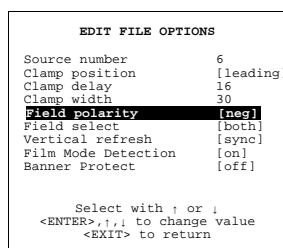
Menu 13-11



Menu 13-12



Menu 13-13



Menu 13-14

### How to setup the different parameters

How to setup and the way to do it, please refer to the chapters File identification (File identification, page 53) and Changing the file parameters (Changing the parameter settings, page 56).

## 13.5 Changing the parameter settings

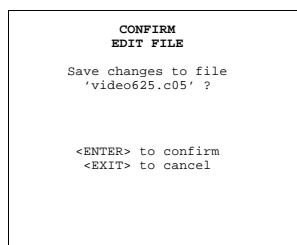
### Overview

- Changing the parameter settings with the Remote Control
- Changing the parameter settings with the selection wheel

### 13.5.1 Changing the parameter settings with the Remote Control

#### Saving changes to file

How to change the different parameters in the Edit mode is illustrated in the drawings below. After the necessary changes have been applied, press **EXIT** key to return. A confirm edit file window is displayed allowing to 'confirm', press **<ENTER>**, or to 'cancel', press **<EXIT>**, the applied changes.



Menu 13-15

### Pixel and Line Values

- Select item to be changed, using ↑ or ↓ cursor key, and follows instructions as indicated in drawings. (image 13-3, image 13-4, image 13-5)

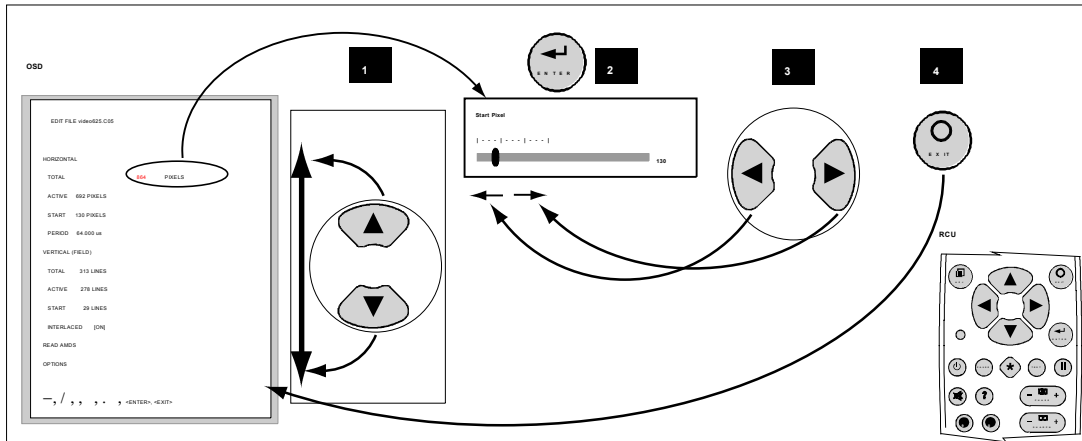


Image 13-3  
Changing Pixel and Line values adjusting the bar scale

- 1 Press the ↑ or ↓ cursor key to select item to be changed
- 2 Press ENTER to activate the bar scale
- 3 Press the ← or → cursor key to adjust the bar scale
- 4 Press EXIT to return

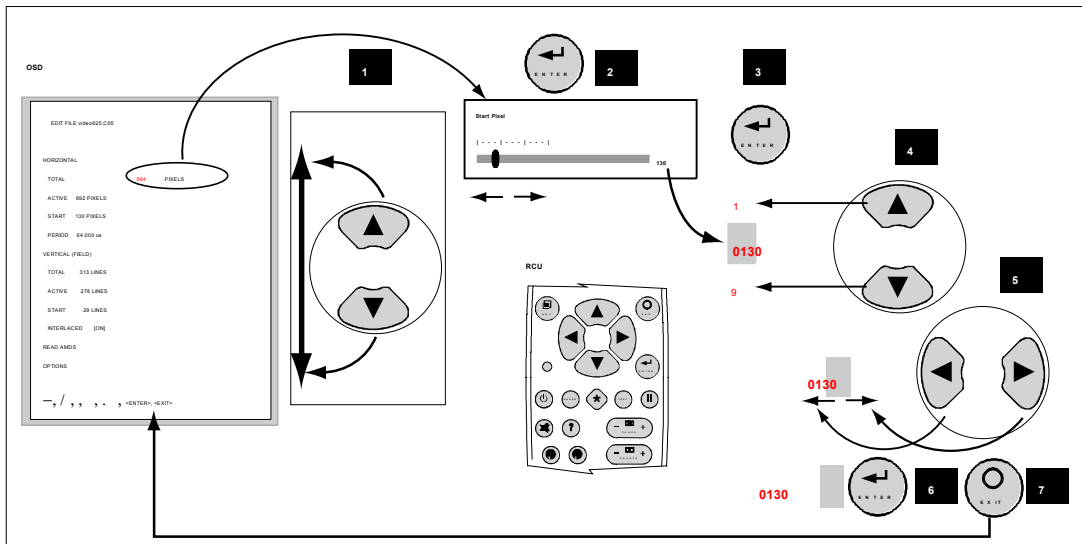


Image 13-4  
Changing Pixel and Line values adjusting the value itself with the cursor keys

- 1 Press the ↑ or ↓ cursor key to select item to be changed
- 2 Press ENTER to activate the bar scale
- 3 Press ENTER to activate value number in bar scale
- 4 Press the ← or → cursor key to change the number
- 5 Press the ← or → cursor key to jump to the next number
- 6 Press ENTER to save value change
- 7 Press EXIT to return

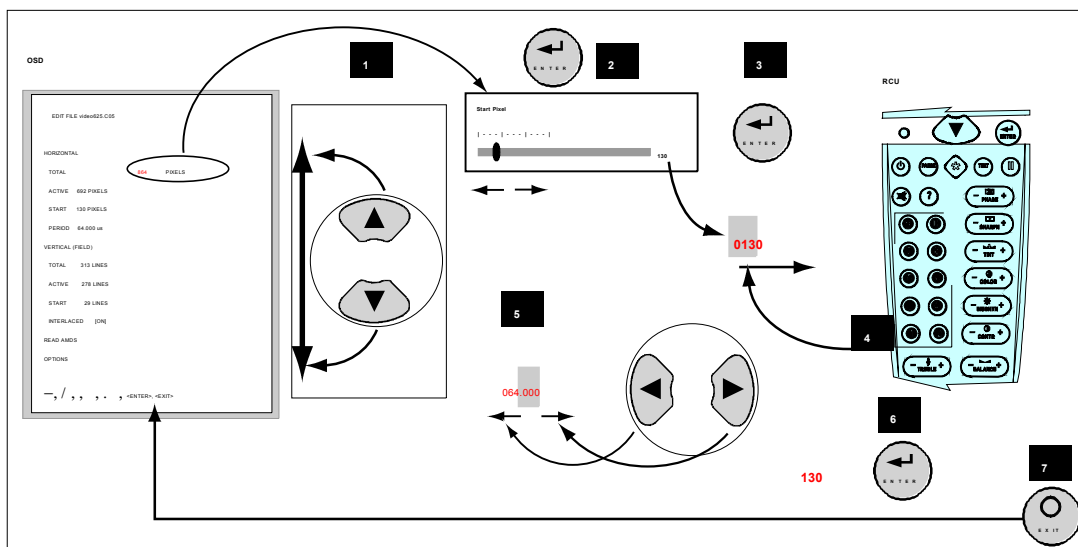


Image 13-5  
Changing Pixel and Line values adjusting the value with the digit buttons of the RCU

- 1 Press the ↑ or ↓ cursor key to select item to be changed
- 2 Press ENTER to activate the bar scale
- 3 Press ENTER to activate value number in bar scale
- 4 Press the digit button on the RCU to put a new value number
- 5 Press the ← or → cursor key to jump to the next number or to return
- 6 Press ENTER to save value change
- 7 Press EXIT to return

### Line Period

1. Select item to be changed, using ↑ or ↓ cursor key, and follows instructions as indicated in drawings. (image 13-6, image 13-7)

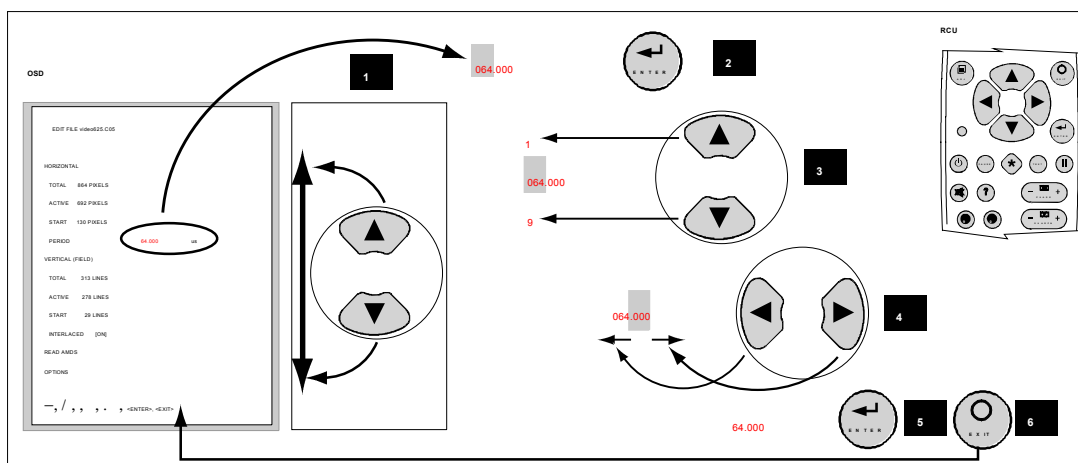


Image 13-6  
Changing Line period value adjusting the value itself with the cursor keys

- 1 Press the ↑ or ↓ cursor key to select item to be changed
- 2 Press ENTER to activate the value number
- 4 Press the ↑ or ↓ cursor key to change the number
- 5 Press the ← or → cursor key to jump to the next number
- 6 Press ENTER to save value change
- 7 Press EXIT to return

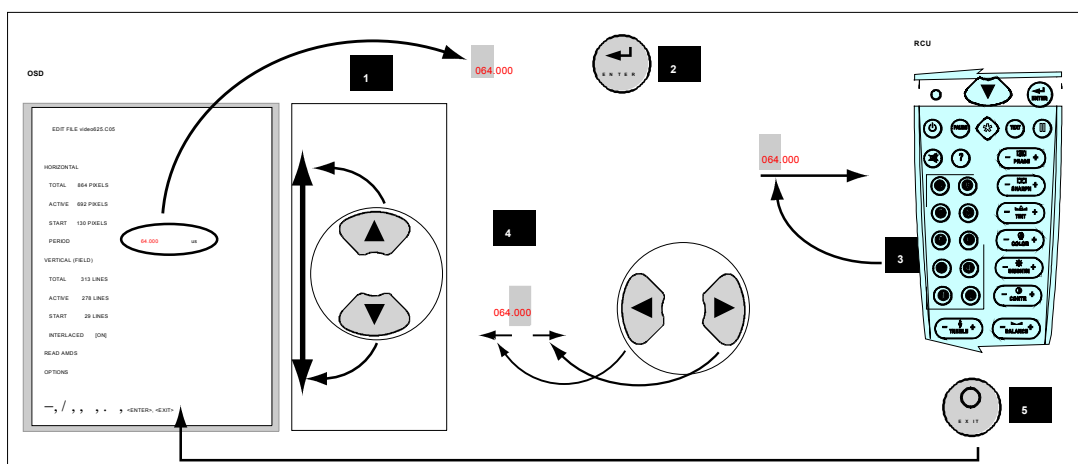


Image 13-7  
adjusting the value itself with the digit buttons on the Remote Control

- 1 Press the ↑ or ↓ cursor key to select item to be changed
- 2 Press ENTER to activate the bar scale
- 3 Press ENTER to activate value number in bar scale
- 4 Press the digit button on the RCU to put a new value number
- 5 Press the ← or → cursor key to jump to the next number
- 6 Press ENTER to save value change
- 7 Press EXIT to return

### Setting between brackets

1. Select item to be changed, using ↑ or ↓ cursor key, and follows instructions as indicated in drawing. (image 13-8)

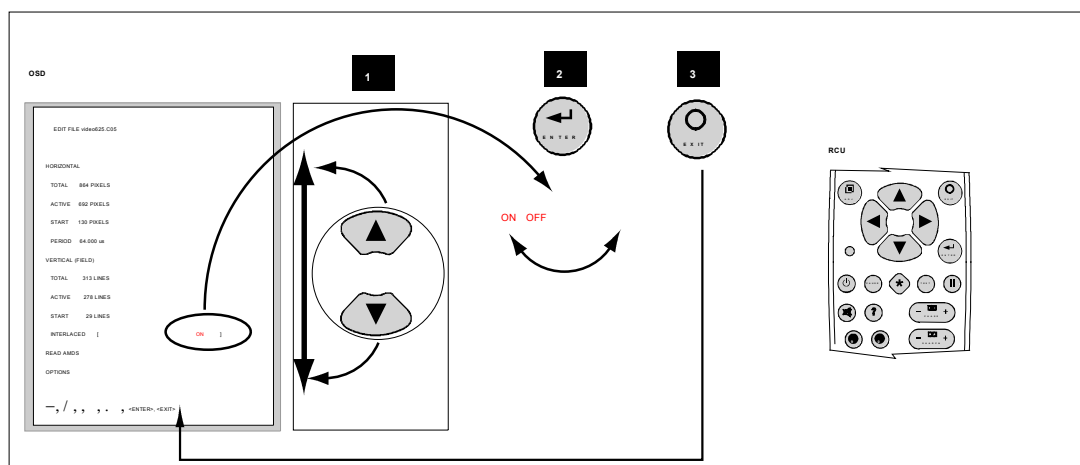


Image 13-8  
Function setting using ENTER button as toggle key

- 1 Press the ↑ or ↓ cursor key to select item to be changed
- 2 Press ENTER to change the setting
- 7 Press EXIT to return

## 13.5.2 Changing the parameter settings with the selection wheel

### How to use the selection wheel

1. Rotate the selection wheel to scroll through the menus or to change values.
2. Press the selection wheel to toggle or confirm.
3. Select RETURN in the menus, followed by pressing the selection wheel to return.

## 13.6 Rename a file

### How to enter the Rename File menu

1. From the adjustment mode menu, select item *RANDOM ACCESS*. (menu 13-16)

The Random Access adjustment mode menu appears on-screen and in the graphical display. (menu 13-17)

2. From the Random Access adjustment mode menu, select item *FILE SERVICE*.

The File Service menu appears on-screen and in the graphical display. (menu 13-18)

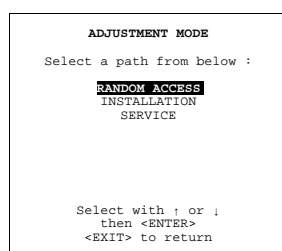
3. From the File Service menu, select item *RENAME*.

The Rename File menu appears on-screen and in the graphical display. The Rename File menu contains a list of all customer files with on top the active file. (menu 13-19)

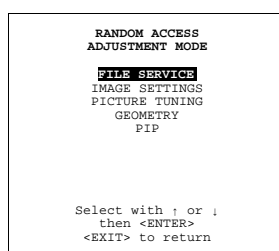
4. Select the file name to be changed and press ENTER to confirm.

The Rename File menu is displayed, indicating:

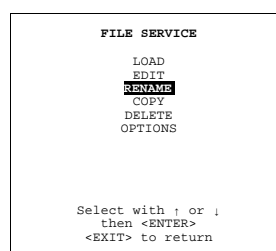
- Next to 'From file name': the filename to be changed.
- Next to 'To filename': a copy of the filename which can be changed already with the first character selected. (menu 13-20)



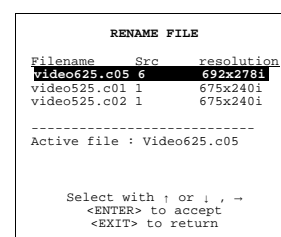
Menu 13-16



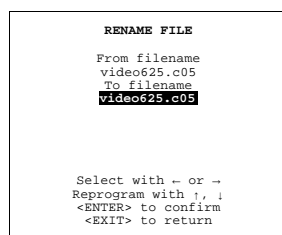
Menu 13-17



Menu 13-18



Menu 13-19



Menu 13-20

### How to rename (changing the characters) the file

1. Change the character with the cursor keys ↑ or ↓. A character can be a small letter (from a to z) or a number (from 0 to 9). Number from 0 to 9 can be entered with the digit keys on the remote Control. (image 13-9)
2. Select the character with the ← or → cursor key.
3. Finally, press **ENTER** to confirm the renamed file.

For a few seconds, the message 'Rename File Completed' appears on-screen and in the graphical display.

4. To cancel file name change, press **EXIT**.

The system returns to the File Name selection menu and no changes to the file name are applied.



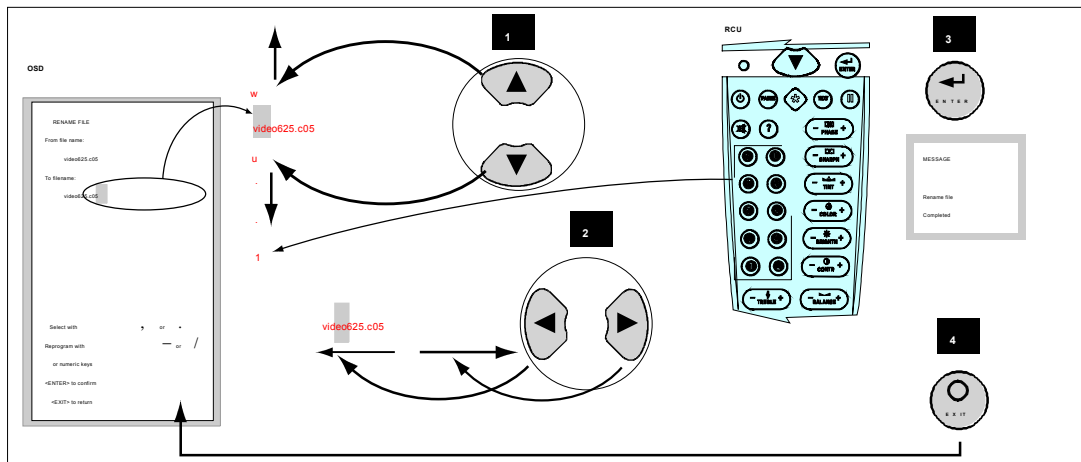


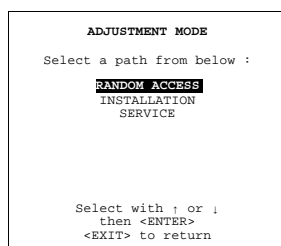
Image 13-9

- 1 Press ↑ or ↓ cursor key to change the character
- 2 Press ← or → cursor key to select a character
- 3 Press ENTER to confirm change
- 4 Press EXIT to cancel file name change

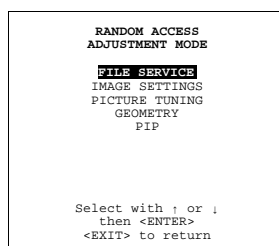
## 13.7 Copy a File

### How to enter the Copy File menu

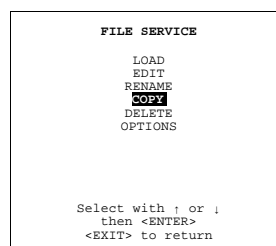
1. From the adjustment mode menu, select item **RANDOM ACCESS**. (menu 13-21)  
The Random Access adjustment mode menu appears on-screen and in the graphical display. (menu 13-22)
2. From the Random Access adjustment mode menu, select item **FILE SERVICE**.  
The File Service menu appears on-screen and in the graphical display. (menu 13-23)
3. From the File Service menu, select item **COPY**.  
The Copy File menu appears on-screen and in the graphical display. The Copy File menu contains a list of all customer and standard files. (menu 13-24)
4. Select the file name to be copied and press **ENTER** to confirm.  
The Copy File menu is displayed, indicating:
  - Next to 'From file name': the filename to be changed.
  - Next to 'To filename': a copy of the filename which can be changed already with the first character selected. (menu 13-25)



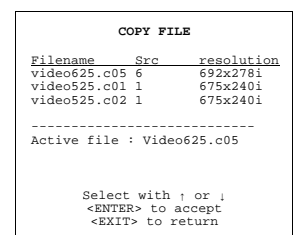
Menu 13-21



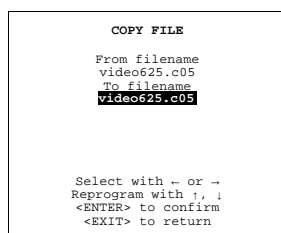
Menu 13-22



Menu 13-23



Menu 13-24



Menu 13-25

### How to rename (changing the characters) the file

1. Change the character with the cursor keys ↑ or ↓. A character can be a small letter (from a to z) or a number (from 0 to 9). Number from 0 to 9 can be entered with the digit keys on the remote Control. (image 13-10)
2. Select the character with the ← or → cursor key.
3. Finally, press **ENTER** to confirm copying the renamed file.

For a few seconds, the message 'Copy File Completed' appears on-screen and in the graphical display.

4. To cancel file copy, press **EXIT**.

The system returns to the File Copy selection menu and no copy of the file has been made.

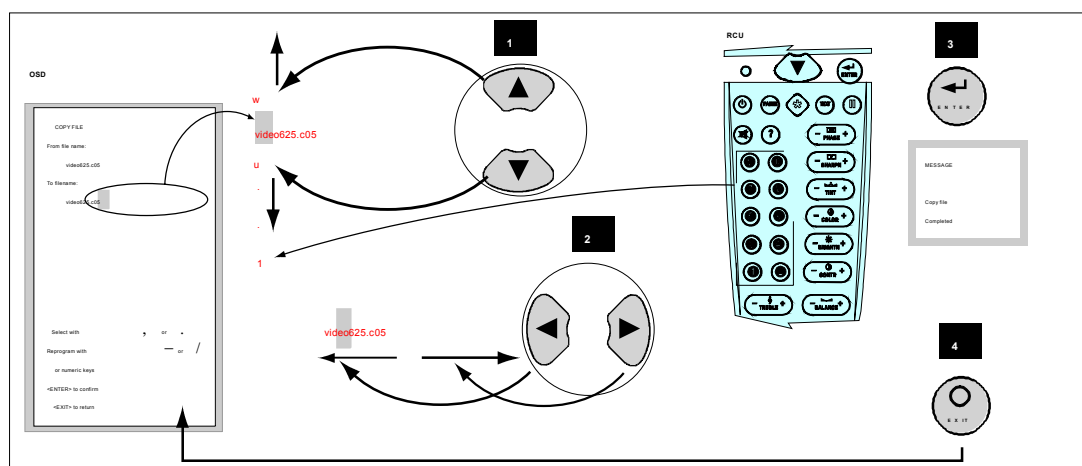


Image 13-10

- 1 Press ↑ or ↓ cursor key to change the character
- 2 Press ← or → cursor key to select a character
- 3 Press ENTER to confirm change
- 4 Press EXIT to cancel file name change

## 13.8 Delete a File from file list

### How to delete a file from file list

1. From the adjustment mode menu, select item *RANDOM ACCESS*. (menu 13-26)

The Random Access adjustment mode menu appears on-screen and in the graphical display. (menu 13-27)

2. From the Random Access adjustment mode menu, select item *FILE SERVICE*.

The File Service menu appears on-screen and in the graphical display. (menu 13-28)

3. From the File Service menu, select item *DELETE*.

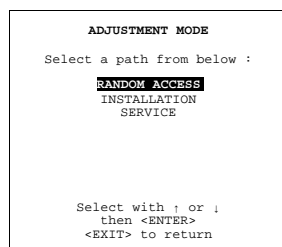
The Delete File menu appears on-screen and in the graphical display. The Delete File menu contains a list of all customer files (Standard files cannot be deleted). (menu 13-29)

4. Select the file name to be deleted and press **ENTER** to accept.

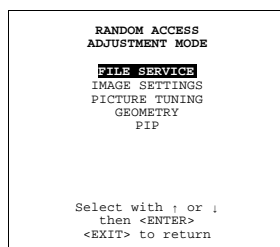
A confirmation menu with the request for 'Delete file "video625.c05"' pops up on-screen and in the graphical display. (menu 13-30)

5. Press **ENTER** to delete the file, press **EXIT** to cancel deleting the file.

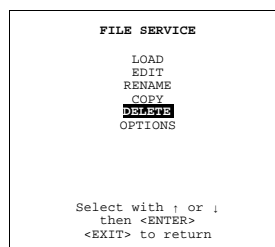
**Note:** The active file can never be deleted.



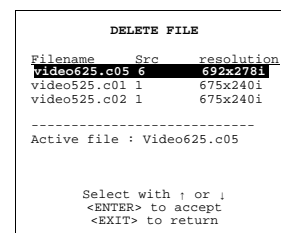
Menu 13-26



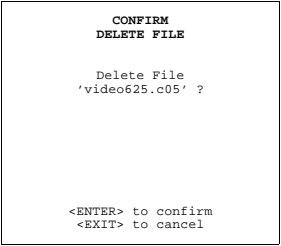
Menu 13-27



Menu 13-28



Menu 13-29



Menu 13-30

13.9 File Options (Sort and Load)

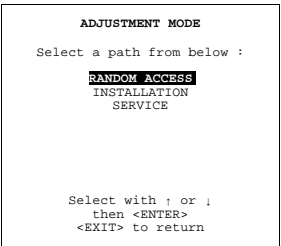
How to set the Sort class and Load mode

- 1. From the adjustment mode menu, select item *RANDOM ACCESS*. (menu 13-31)  
The Random Access adjustment mode menu appears on-screen and in the graphical display. (menu 13-32)
- 2. From the Random Access adjustment mode menu, select item *FILE SERVICE*.  
The File Service menu appears on-screen and in the graphical display. (menu 13-33)
- 3. From the File Service menu, select item *OPTIONS*.  
The Option menu appears on-screen and in the graphical display, showing two items to be set: (menu 13-34)

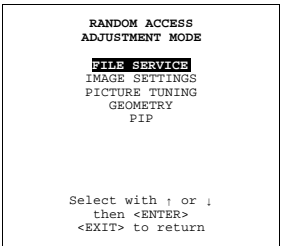
File Sort		
	[name]	The files in the list will be sorted on the file name.
	[index]	The files in the list will be sorted on the file extension.

File Load		
	[automatic]	Correct file will be loaded automatically.
	[manual]	Correct file has to be loaded manually.

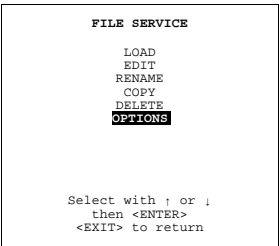
- 4. Select File Sort item to be setup and set the option between brackets, using the **ENTER** button as toggle key.
- 5. Finally, press **EXIT** to return to File Service menu.



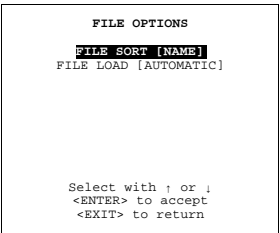
Menu 13-31



Menu 13-32



Menu 13-33



Menu 13-34



# 14. ACSAR SET UPS



Some items in the Service menu are password protected (when the password function is active). Once password entered, all password protected items become accessible within the Adjustment mode.

## Overview

- Entering the Service Menu
- ACSAR Identification
- Password Change
- ACSAR Address Change
- Serial Communication Set Up
- Display BARCO Logo
- Advanced Processing
- I2C Diagnosis

## Where to find the ACSAR set ups

These set ups are grouped in the Service menu. The latter is divided in 2 groups, linked with the item 'more'.

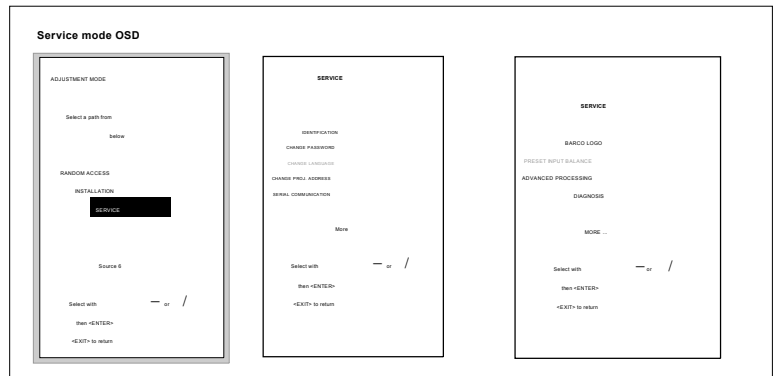


Image 14-1  
Overview service menu on-screen

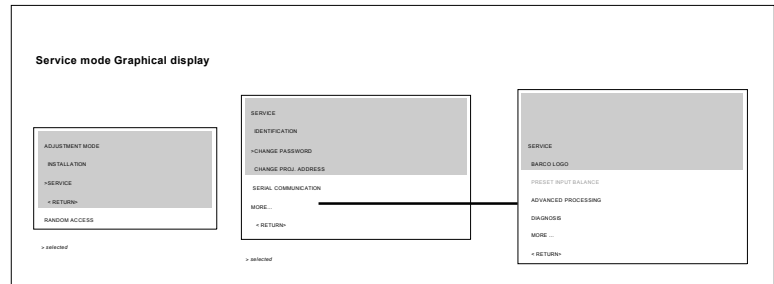


Image 14-2  
Overview service menu graphical display

## 14.1 Entering the Service Menu

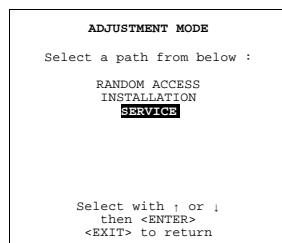
### How to enter the Service menu

1. From the Adjustment mode menu, select item *SERVICE*. (menu 14-1)

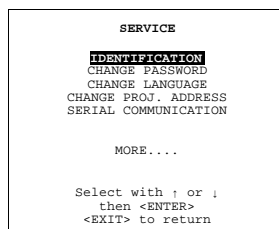
The Service menu appears on-screen and in the graphical display. (menu 14-2)

2. To display the other items of the service mode, select item *MORE* and press **ENTER** or press selection wheel to confirm.

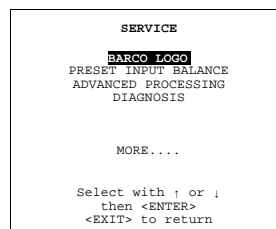
Second part of the service mode is displayed. The item *MORE*, allows to return to part 1 of the service menu. (menu 14-3)



Menu 14-1



Menu 14-2



Menu 14-3



**Item PRESET INPUT BALANCE:** this item is not active for reason that it belongs to a factory adjusted procedure.

## 14.2 ACSAR Identification

### How to enter the Identification menu

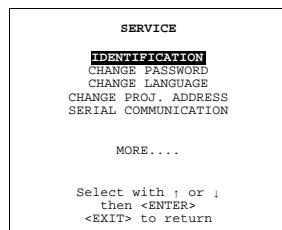
1. From the Service mode menu, select item *IDENTIFICATION*. (menu 14-4)

The Identification menu appears on-screen and in the graphical display. (menu 14-5)

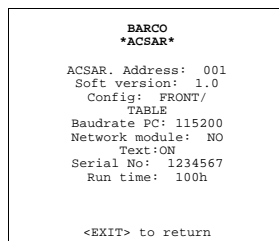
The identification menu reveals the following info about the ACSAR:

- Address of the ACSAR: adjustable, 0 up to 9 remotely accessible, or up to 255, PC accessible.
- Installed software version.
- Configuration set up: related to D-Cine Premiere which is always Front/Table, not adjustable.
- Baudrate PC: transfer speed for communication with a PC, adjustable.
- Present of a Network module.
- Text: On Screen Display (OSD) enabled (ON) or disabled (OFF).
- Serial number: fabrication number of the unit, useful when calling for technical assistance.
- Run time: total run time since first start up.

2. Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.



Menu 14-4



Menu 14-5

## 14.3 Password Change

### Overview

- About Use of Password
- Password Number Change
- Filling In the Access Control list

### 14.3.1 About Use of Password

#### Password protection Active/Not active

Password protection of items in the adjustment mode is active Yes (ON) or Not (OFF), depending the position of switch2 of the Dip switch unit S1 on the Processor board.



Image 14-3  
Dip switches on processor board

#### Password Users

The software has provided 3 password levels, one for the Owner, the User and the Guest. The Owner is in rang the administrator, meaning, the owner determine which password protected items opens when the others use their password as entry.

### 14.3.2 Password Number Change

#### How to change the password number

1. From the Service menu, select item *CHANGE PASSWORD*. (menu 14-6)  
**Note:** Entering the Change Password menu is restricted to the owner only.

The Change password menu appears on-screen and in the graphical display. This menu displays the exiting password numbers for owner, user and guest . (menu 14-7)

2. Select the password number which has to be changed and press **ENTER** or selection wheel to confirm.

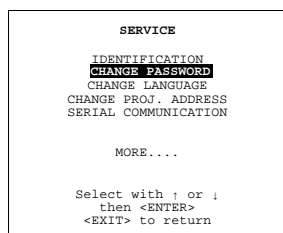
The first digit in the password number is active and ready to be changed.

3. Enter the new password number as follows:

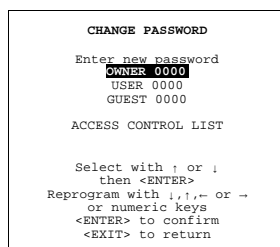
- With the Remote Control: successively enter with the numeric buttons a new number. Terminate number entry by pressing **ENTER**.
- With the selection wheel: rotate selection wheel to change the digit and press wheel to jump to next digit. Terminate number entry by pressing selection wheel.

When terminating number entry, the on-screen displays for a few seconds the Message 'Changed password completed'. (menu 14-8)

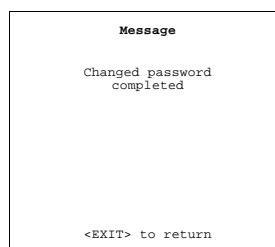
- Repeat the procedure from step 2 for the other password numbers.
- Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.



Menu 14-6



Menu 14-7



Menu 14-8

### 14.3.3 Filling In the Access Control list

#### About Access Control List

The access control list allows the OWNER to define the accessible items for the USER and the GUEST for entry with their own password.

#### How to fill in the access control list.

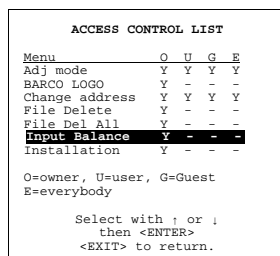
- From the Change Password menu, select item *ACCESS CONTROL LIST*. (menu 14-9)

The Access Control List menu appears on-screen and in the graphical display. This menu displays the menus and menu items which can made accessible for the User, the Guest and Everybody. All the items, on which an access right is applicable, can be seen in the menu by scrolling. (menu 14-10)

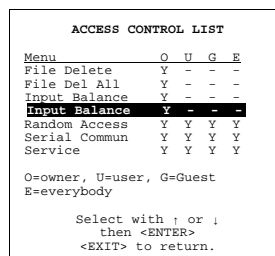
- From the scroll list, successively select the items on which you will change the access rights, e.g. Input balance.
- Apply the access rights ("Y" on-screen and "+" in graphical display) for an item to User, Guest and Everybody as follow:
  - With the Remote Control: successively press **ENTER** (pressing once, add a "Y" to the next column) until the access rights are filled in, e.g. Y- - -.
  - With the selection wheel: successively press wheel (pressing once, add a "+" to the next column) until the access rights are filled in, e.g. Y + + + +.
- Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.



Menu 14-9



Menu 14-10



Menu 14-11

## 14.4 ACSAR Address Change

#### About Address

The ACSAR can be programmed with two addresses, an unique and a common address.



- Unique address: differ from "0" and "1" and is specific for that unit. The ACSAR execute the commands from the Remote Control if the latter is programmed on the same unique address.

Controlling ACSAR	
With Remote Control	used addresses 0 up to 9
With Computer e.g. IBM PC (or compatible), Apple,MAC, etc...	used addresses 000 up to 255

- Common address: only 2 values are possible "0" or "1" (adjustable). The ACSAR execute the commands from the Remote Control if the latter is programmed on the same common address.

### Storing the individual address

- From the Service menu, select item *CHANGE PROJ. ADDRESS*. (menu 14-12)

The Change Projector (=ACSAR) Address menu appears on-screen and in the graphical display. This menu displays the already stored addresses, common and unique. (menu 14-13)

- Select the ACSAR Address item press **ENTER** or selection wheel to confirm.

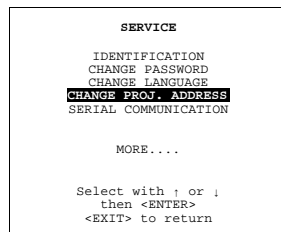
The first digit in the address number, composed of 3 digits, is active and ready to be changed.

- Enter the new address number as follows:

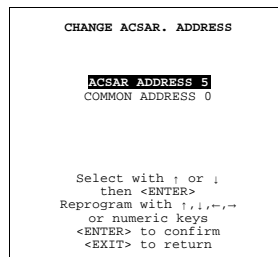
- With the Remote Control: successively enter with the numeric buttons a new number. Terminate number entry by PRESSING SELECTION WHEEL on ACSAR (Remote Control becomes inactive after the address change and has to be reprogrammed on the new address, if between 0 and 9)).
- With the selection wheel: rotate selection wheel to change the digit and press wheel to jump to next digit. Terminate number entry by pressing selection wheel.

The new value is stored or if an incorrect value has been putted in, a message 'Invalid Address' is displayed indicating the correct value range. (menu 14-14)

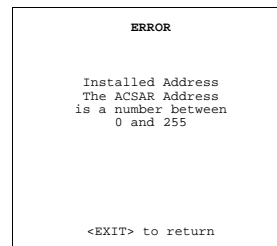
- Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.



Menu 14-12



Menu 14-13



Menu 14-14

### Storing the common address

- Select the Common Address item and press **ENTER** or selection wheel to confirm. (menu 14-15)

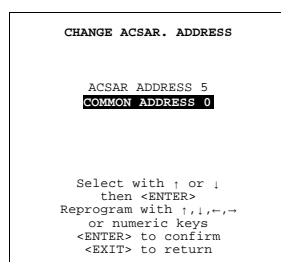
The address digit is active and ready to be changed.

- Enter the new address number as follows:

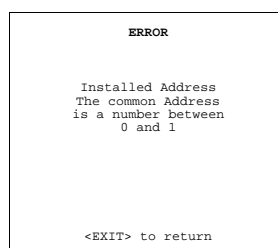
- With the Remote Control: enter with the numeric buttons a new number. Terminate number entry by pressing **ENTER**.
- With the selection wheel: rotate selection wheel to change the digit and press wheel to terminate

The new value is stored or if an incorrect value has been putted in, a message 'Invalid Address' is displayed indicating the correct value range. (menu 14-16)

- Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.



Menu 14-15



Menu 14-16

## 14.5 Serial Communication Set Up

### Overview

- Entering the Serial Communication menu
- Setting the BAUDRATE
- Setting the Interface Standard

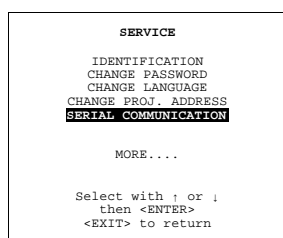
### 14.5.1 Entering the Serial Communication menu

#### How to enter the menu

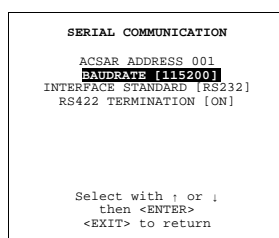
1. From the Service menu, select item *SERIAL COMMUNICATION*. (menu 14-17)

The Serial Communication menu appears on-screen and in the graphical display. This menu displays the already stored communication speed (Baudrate) and Interface standard. The RS422 termination item is linked to the Interface standard RS422. (menu 14-18)

2. Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.



Menu 14-17



Menu 14-18

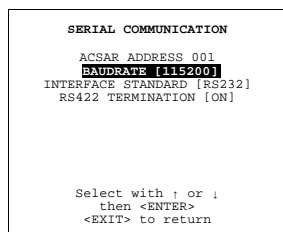
### 14.5.2 Setting the BAUDRATE

#### Use of the serial Communication connection

This connection allows to control the ACSAR remotely via an IBM PC (or compatible) or MAC and data transfer. The transmission speed of the ACSAR has to match the speed of the connected control unit.

#### How to set the BAUDRATE

1. From the Serial Communication menu, select the BAUDRATE item. (menu 14-19)
- Transmission speed, between brackets, is active and can be changed.
2. Use **ENTER** button or selection Wheel as toggle switch to enter the new Baudrate value.  
Available Baudrates: 115200 – 57600 – 38400 – 19200 – 9600 – 4800 – 1200
  3. Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.



Menu 14-19

### 14.5.3 Setting the Interface Standard

#### How to set up the Interface standard

1. From the Serial Communication menu, select the *INTERFACE STANDARD* item. (menu 14-20)  
Interface standard, between brackets, is active and can be changed.
2. Use **ENTER** button or selection Wheel as toggle switch to enter the required interface standard RS232 or RS422.  
If the Interface standard RS422 has been chosen, then, the item *RS422 TERMINATION* has to be set too.
3. From the Serial Communication menu, select the *RS422 TERMINATION* item. (menu 14-21)  
**Note:** *RS422 Termination: in case more ACSAR units are chained, then, the last one in the chain has to be terminated.*  
RS422 Termination status, between brackets, is active and can be changed.
4. Use **ENTER** button or selection Wheel as toggle switch to enter the RS422 Termination status to ON or OFF.  
If the Interface standard RS422 has been chosen, then, the item *RS422 TERMINATION* has to be set too.

```

SERIAL COMMUNICATION
  ACSAR ADDRESS 001
  BAUDRATE [115200]
  INTERFACE STANDARD [RS232]
  RS422 TERMINATION [ON]

Select with ↑ or ↓
then <ENTER>
<EXIT> to return
  
```

Menu 14-20

```

SERIAL COMMUNICATION
  ACSAR ADDRESS 001
  BAUDRATE [115200]
  INTERFACE STANDARD [RS232]
  RS422 TERMINATION [ON]

Select with ↑ or ↓
then <ENTER>
<EXIT> to return
  
```

Menu 14-21

### 14.6 Display BARCO Logo

#### About BARCO logo

The BARCO logon, in a black background window, can be pasted in the image. The place on the image is adjustable.

### Display Yes or No of the BARCO display

- From the Service menu, select item BARCO logo. (menu 14-22)

The BARCO logo menu is displayed with 3 adjustable items, Status of the logo, place of the logo on the image and setting the Hot key (Background is not adjustable and is default black). (menu 14-23)

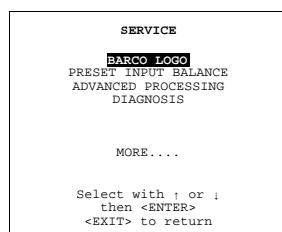
- Successively select the 3 items and proceed to set up:

Result of the settings:

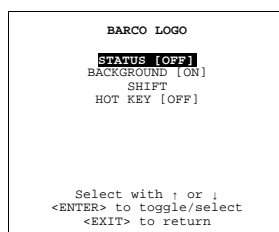
STATUS	
ON	BARCO logo will be displayed on the image
OFF	No BARCO logo display

SHIFT	
Using Remote Control	Use the arrow keys, ↑,↓,← and → to position the BARCO logo on the image.
Using selection wheel	Press selection wheel to select the move direction H(or) or V(ert) and rotate the wheel to shift the logo window.

HOT KEY	
OFF	TEXT key NOT programmed to switch On or Off the logo in the operational mode.
ON	TEXT key programmed to switch On or Off the logo in the operational mode. (image 14-4)



Menu 14-22



Menu 14-23

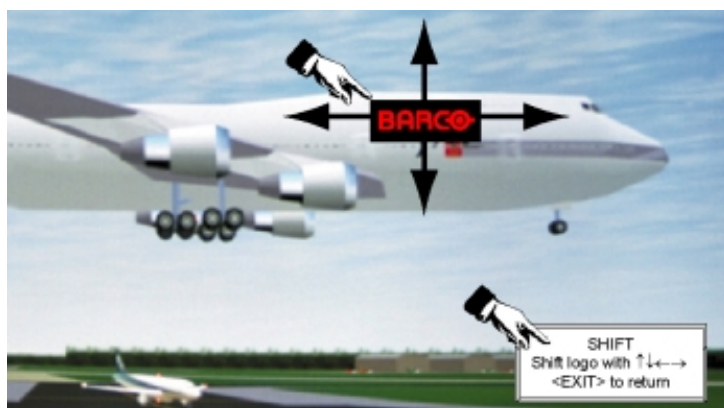


Image 14-4  
BARCO logo display on image

## 14.7 Advanced Processing

### About Advanced Processing

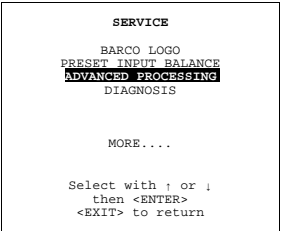
In the normal mode, the processing (scaling and de-interlacing) in the ACSAR introduces a few frames delay (from input to output). Setting this option to "ON" disables all scaling and de-interlacing in the processor and reduce frame delay in the ACSAR (from input to output) to 0 frames.

The intended use of this option is to apply **native and progressive data** to the projector and displaying it with minimum delay, using the full resolution of the projector. Other formats will be displayed either non scaled and/or interlaced.

This feature can be used if additional delay in the projector is not acceptable, for instance, if an external scaler/de-interlace does the processing.

Setting the minimum delay

- 1. From the Service menu, select item ADVANCED PROCESSING. (menu 14-24)  
The Advanced Processing menu displays only 1 item, MINIMUM DELAY [ON]. The latter can be toggled to On or Off.
- 2. Press **ENTER** or selection wheel to enable (On) or disable (Off) the minimum delay.
- 3. Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.

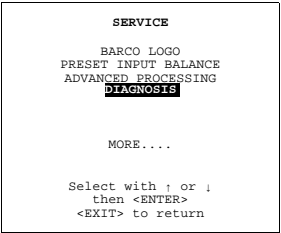


Menu 14-24

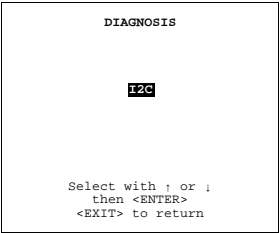
14.8 I2C Diagnosis

How to enter the I2C diagnosis menu

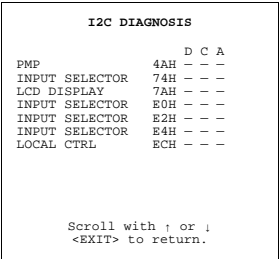
- 1. From the Service menu, select item DIAGNOSIS (menu 14-25)  
The Diagnosis menu displays only 1 item, I2C. The latter is active. (menu 14-26)
- 2. Press **ENTER** or selection wheel to enter the I2C diagnosis list.  
I2C diagnosis menu displays a list of I2C addressable boards with the respective hex code. The I2C line is checked on (D)ata, (C)lock and (A)knowledge. Green color for D, C and A means no failure, red color, means failure. (menu 14-27)
- 3. Press **EXIT** (RCU) or select item RETURN with selection wheel on ACSAR to return.



Menu 14-25



Menu 14-26



Menu 14-27



# 15. IMAGE ALIGNMENT

## Overview

- Entering the Random Access Mode menu
- Image Settings
- Picture in Picture (PIP)
- Framing the Image (Blanking)
- Adjusting the Image Aspect Ratio
- Image Side Keystone
- Vertical and Horizontal Image Shift
- Vertical and Horizontal Image Size

## About set ups for the image

Set ups for the image are grouped in the Random Access Mode menu. The different main items are:

- IMAGE SETTINGS: contains the analog controls e.g. Contrast, Brightness, Tint.....
- PICTURE TUNING: contains decoder settings and Input Balance adjustment.
- GEOMETRY: contains the adjustments for image Size, Shift, Keystone, Aspect Ratio and Blanking.
- PIP: contains the set ups for Picture in Picture.

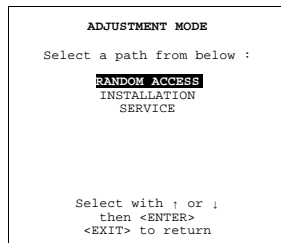
## 15.1 Entering the Random Access Mode menu

### How to enter the Random Access Mode

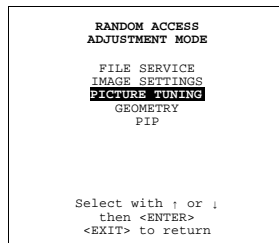
1. From the adjustment mode menu, select item *RANDOM ACCESS*. (menu 15-1)

The Random Access adjustment mode menu appears on-screen and in the graphical display. (menu 15-2)

2. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-1



Menu 15-2

## 15.2 Image Settings

### Overview

- Adjusting the Analog Image Controls
- Image Fine Tuning

### 15.2.1 Adjusting the Analog Image Controls

#### How to adjust the analog controls

1. From the Random Access mode menu, select item *IMAGE SETTINGS*. (menu 15-3)

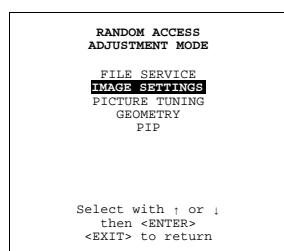
The Image Setting menu appears on-screen and in the graphical display. (menu 15-4)

2. Successively select the Image Setting items, causing on-screen and in the graphical display the respective bar scale, and proceed to the adjustments:

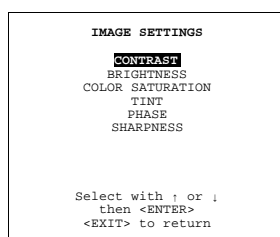
The adjustments results in:

Image setting item	Press cursor key ← or turn selection wheel to the left	Press cursor key → or turn selection wheel to the right
CONTRAST	For less contrast	For more contrast
BRIGHTNESS	For less brightness	For more brightness
COLOR SATURATION	For less color intensity	For more color intensity
TINT (only NTSC signals)	Skin tones become purplish	Skin tones become greenish
SHARPNESS	not implemented	not implemented
PHASE (Computer signals)	to refine the vertical stripes	

3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-3



Menu 15-4

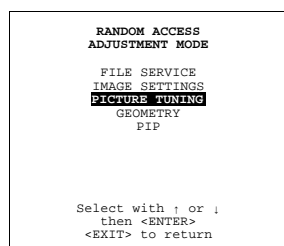
### 15.2.2 Image Fine Tuning

#### 15.2.2.1 Entering the Picture Tuning menu

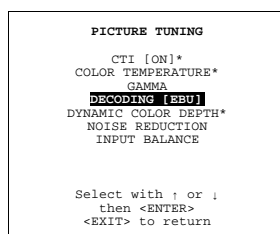
##### How to enter the Picture Tuning menu

1. From the Random Access mode menu, select item *PICTURE TUNING*. (menu 15-5)

The Picture tuning menu appears on-screen and in the graphical display. Noted that the menu items indicated with a “\*” are not implemented. (menu 15-6)



Menu 15-5



Menu 15-6



### 15.2.2.2 Decoding standard EBU – IRE

#### About decoding

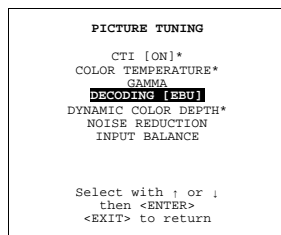
NTSC video inputs signals can be decoded via the default American IRE standard or via the European EBU standard. Decoding a NTSC video signal using the EBU standard may result in a greenish tint.

#### How to set up the decoding standard

1. From the Picture tuning menu, select item *DECODING*. (menu 15-7)

The decoding standard, indicated between brackets, can be chosen.

2. Press **ENTER** or selection wheel to toggle the decoding standard to EBU (European standard) or to IRE (American standard) , depending the selected input source.
3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-7

### 15.2.2.3 Noise reduction

#### About Noise reduction

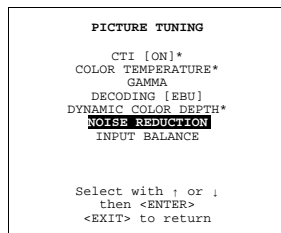
Adjusting the noise reduction level results in a less noise and pixel jitter in all video and data sources.

#### How to adjust the Noise reduction

1. From the Picture tuning menu, select item *NOISE REDUCTION*. (menu 15-8)

The Noise reduction bar scale appears on-screen and in the graphical display. The Noise reduction level is adjustable in 7 steps. (image 15-1)

2. Press cursor key ← ,→ (RCU) or rotate selection wheel to the left or to the right for optimal image display.
3. Press **EXIT** or selection wheel to return.



Menu 15-8

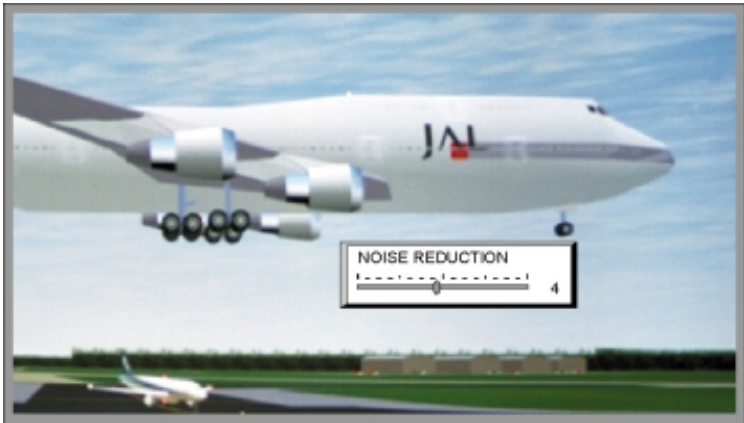


Image 15-1  
Noise reduction adjustment

### 15.2.2.4 GAMMA Correction

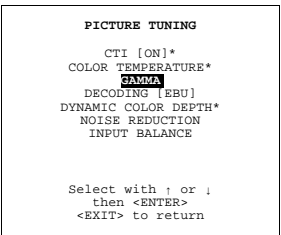
#### About GAMMA Correction

Gamma is an image quality enhancement function that offers a richer image by brightening the darker portions of the image without altering the brightness of the brighter portions. Table below explains the different value ranges.

Gamma Value	Influence on the displayed image
$\gamma = 2.2$	This is the standard value. With reference to the eye perception, the displayed image is the most natural image. (Best match between camera recording, projector display and human eye).
$1.0 < \gamma < 2.2$	A lower value enhanced the details in the dark image content, without changing the black level, resulting in a lower contrast perception.
$2.2 > \gamma > 3.1$	A higher value occurs a fade away of the details in the dark image content, without changing the black level, resulting in a higher contrast perception.

#### How to set up the correct GAMMA value

1. From the Picture tuning menu, select item *GAMMA*. (menu 15-9)  
The GAMMA bar scale appears on-screen and in the graphical display. The GAMMA level is adjustable in 7 steps. (image 15-2)
2. Press cursor key  $\leftarrow, \rightarrow$  (RCU) or rotate selection wheel to the left or to the right until desired value is displayed.
3. Press **EXIT** or selection wheel to return.



Menu 15-9



Image 15-2  
Gamma adjustment

#### 15.2.2.5 Input Balance (ONLY APPLICABLE on RGB/YUV input signals)

##### About Input Balance

Due to the signal distribution or the signal transmissions, a color imbalance can occur. To allow the customer to be able to correct the imbalance per file, the alignment 'Input Balance', situated in the menu Picture Tuning, has been provided.

Observe the image on color dominance in the black and white areas of the displayed picture. If color dominance has been observed in one of the areas or in both, then proceed to the corresponding input balance adjustment.



**Adjust the Color Saturation level to zero before starting the Input Balance adjustment.**

### How to adjust the Input Balance

Always start with the BLACK balance adjustment if a dominant color has been observed in both areas.

- From the Picture tuning menu, select item *INPUT BALANCE*. (menu 15-10)

The Input Balance menu appears on-screen and in the graphical display. This menu contains 2 items, viz. *WHITE* and *BLACK BALANCE*. (menu 15-11)

- From the Input Balance menu, select item *BLACK BALANCE* and press **ENTER** or selection wheel to confirm.

The Black Level RED bar scale appears on-screen and in the graphical display.

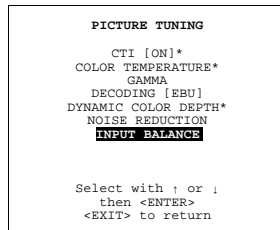
Adjustment:		
With Remote control	Changing from Black Level RED to BLUE bar scale, press respectively once cursor key ↑ or →.	
	Black Level RED Cursor keys← and →	<ul style="list-style-type: none"> <li>Press the cursor keys ← or → to display the Black Level RED bar scale.</li> <li>Press the cursor keys ← or → to adjust the RED level in the dark areas of the image.</li> <li>Press <b>EXIT</b> to return.</li> </ul>
	Black Level BLUE Cursor keys↑ and ↓	<ul style="list-style-type: none"> <li>Press the cursor keys ↑ or ↓ to display the Black Level BLUE bar scale.</li> <li>Press the cursor keys ↑ or ↓ to adjust the BLUE level in the dark areas of the image.</li> <li>Press <b>EXIT</b> to return.</li> </ul>
With selection wheel	<ul style="list-style-type: none"> <li>At start up, Black Level RED bar scale is displayed.</li> <li>Rotate selection wheel to adjust the RED level in the dark areas of the image.</li> <li>Press selection wheel to display Black Level BLUE bar scale.</li> <li>Rotate selection wheel to adjust the BLUE level in the dark areas of the image.</li> <li>Press selection wheel to confirm and return.</li> <li>To repeat steps, press selection wheel again.</li> </ul>	

- From the Input Balance menu, select item *WHITE BALANCE* and press **ENTER** or selection wheel to confirm.

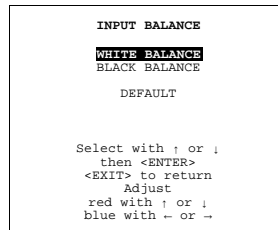
The White Level RED bar scale appears on-screen and in the graphical display.

Adjustment:		
With Remote control	Changing from White Level RED to BLUE bar scale, press respectively once cursor key ↑ or →.	
	White Level RED Cursor keys← and →	<ul style="list-style-type: none"> <li>Press the cursor keys ← or → to display the White Level RED bar scale.</li> <li>Press the cursor keys ← or → to adjust the RED level in the white areas of the image.</li> <li>Press <b>EXIT</b> to return.</li> </ul>
	White Level BLUE Cursor keys↑ and ↓	<ul style="list-style-type: none"> <li>Press the cursor keys ↑ or ↓ to display the White Level BLUE bar scale.</li> <li>Press the cursor keys ↑ or ↓ to adjust the BLUE level in the white areas of the image.</li> <li>Press <b>EXIT</b> to return.</li> </ul>
With selection wheel	<ul style="list-style-type: none"> <li>At start up, the White Level RED bar scale is displayed.</li> <li>Rotate selection wheel to adjust the RED level in the bright areas of the image.</li> <li>Press selection wheel to display White Level BLUE bar scale.</li> <li>Rotate selection wheel to adjust the BLUE level in the bright areas of the image.</li> <li>Press selection wheel to confirm and return.</li> <li>To repeat steps, press selection wheel again. (image 15-3)</li> </ul>	

4. If you want to return to the default settings, from the Input Balance menu, select item *DEFAULT* and press **ENTER** or selection wheel to confirm.
5. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-10



Menu 15-11

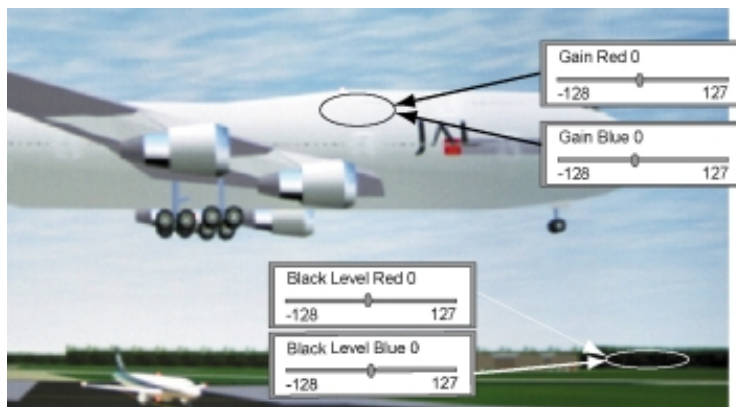


Image 15-3  
Black and White balance adjustment

## 15.3 Picture in Picture (PIP)

### How to set up PIP

1. From the Random Access mode menu, select item *PIP*. (menu 15-12)

The Picture in Picture menu appears on-screen and in the graphical display. The PIP menu items allow to set up the status, source and position of the inserted picture. (menu 15-13)

2. From the PIP menu, successively select item *STATUS*, *SOURCE* and *POSITION* and proceed to the set up.

Set up results in:

STATUS	
ON	Press <b>ENTER</b> or selection wheel to toggle the PIP status to ON. PIP is enabled.
OFF	Press <b>ENTER</b> or selection wheel to toggle the PIP status to OFF. PIP is disabled.

SOURCE	
With Remote control	<ul style="list-style-type: none"> <li>• Press <b>ENTER</b> to activate the source number. The first digit is active and can be changed.</li> <li>• Enter new value, using the digit buttons on the Remote Control. Next digit becomes active.</li> <li>• Enter new value for second digit, using the digit buttons on the Remote Control.</li> <li>• Terminate source number entry with <b>ENTER</b>.</li> </ul>
With selection wheel	<ul style="list-style-type: none"> <li>• Press selection wheel to activate the source number. The first digit is active and can be changed.</li> <li>• Enter new value, by rotating the selection wheel. Press wheel to confirm. Next digit becomes active.</li> <li>• Enter new value for second digit, by rotating the selection wheel.</li> <li>• Terminate source number entry by pressing the selection wheel.</li> </ul>

POSITION	
TOP/LEFT (1) TOP/RIGHT (2) BOTTOM/LEFT (3) BOTTOM/RIGHT (4)	Press <b>ENTER</b> or selection wheel to toggle the PIP in the desired corner on the image. (image 15-4)

3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.

RANDOM ACCESS ADJUSTMENT MODE  FILE SERVICE IMAGE SETTINGS PICTURE TUNING GEOMETRY <b>PIP</b>
Select with ; or   then <ENTER> <EXIT> to return

Menu 15-12

PIP <b>STATUS [ON]</b> SOURCE 07 POSITION [TOP/RIGHT] File name: video625.c05
Select with ; or   then <ENTER> <EXIT> to return

Menu 15-13

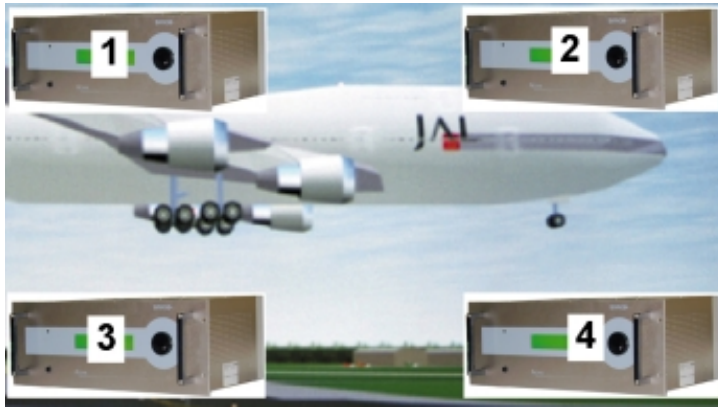


Image 15-4  
Position of PIP

## 15.4 Framing the Image (Blanking)

### About framing the image

Blanking adjustment, affecting the edges of the image only, allow to blank unwanted information at the borders of the image or to frame the image onto the screen.

### How to frame the image

1. From the Random Access mode menu, successively select item *GEOMETRY* and *BLANKING*. (menu 15-14)

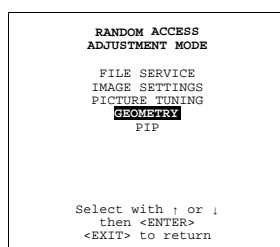
The Blanking menu appears on-screen and in the graphical display. The 4 Blanking menu items allow to frame the image on the 4 edges. (menu 15-16)

2. From the Blanking menu, successively select item *TOP*, *BOTTOM*, *LEFT*, *RIGHT* and proceed to the adjustments:

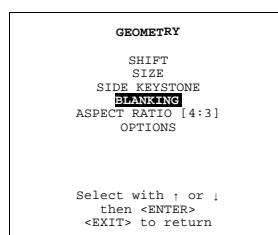
When an item has been selected, the corresponding bar scale appears on-screen and in the graphical display on the ACSAR (A numeric value of "0" on the bar scale indicates no blanking applied). Proceed to the adjustment:

Adjustment		
With Remote control	Numeric buttons (Max. value for TOP and BOTTOM is 255 — for LEFT and RIGHT is 511)	<ul style="list-style-type: none"> <li>• Press <b>ENTER</b> to activate the numeric value on the bar scale. The first digit is active and can be changed.</li> <li>• Enter new value, using the digit buttons on the Remote Control. Next digit becomes active.</li> <li>• Enter new value for second digit, using the digit buttons on the Remote Control. Last digit becomes active.</li> <li>• Enter new value for third digit, using the digit buttons on the Remote Control and terminate value entry with <b>ENTER</b>.</li> <li>• Press <b>EXIT</b> to return.</li> </ul>
	Cursor keys ← and →	<ul style="list-style-type: none"> <li>• Press the cursor keys ← or → until the desired blanking on screen is obtained.</li> <li>• Press <b>EXIT</b> to return.</li> </ul>
With selection wheel	<ul style="list-style-type: none"> <li>• Rotate selection wheel until desired blanking on screen is obtained.</li> <li>• Press selection wheel to confirm and return. (image 15-5)</li> </ul>	

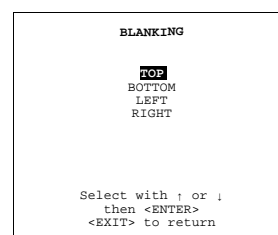
3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-14



Menu 15-15



Menu 15-16

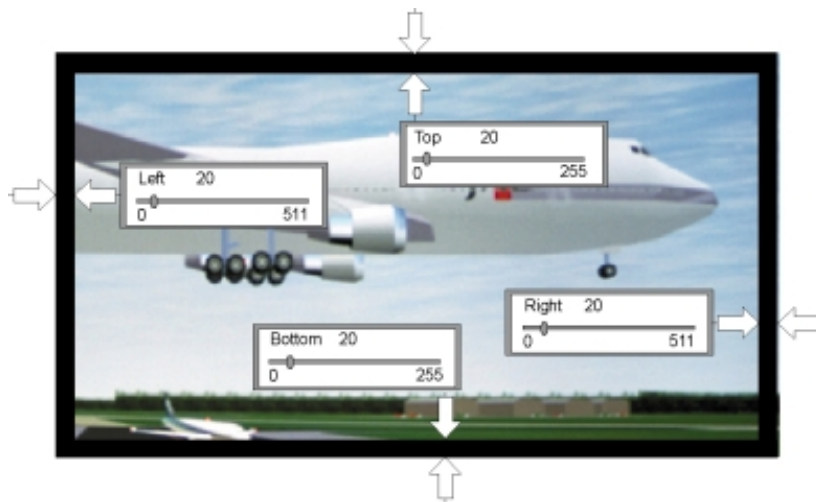


Image 15-5  
Blanking adjustment

## 15.5 Adjusting the Image Aspect Ratio

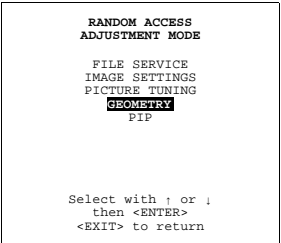
### About Image Aspect Ratio

This function allows you to modify or to customize the displayed image format to enhance the image input format. The following formats are available:

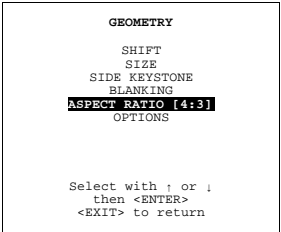
Aspect Ratio	Description
16:9	Wide screen television format/Anamorf format.
4:3	Standard television format.
5:4	Workstations format.
2.35	Panavision or Cinemascope format, frequently used by Hollywood films.
1.88	Film format used by a lot of non-action films.
1.78	Wide screen television format/Anamorf format.

### How to select the correct Image Aspect Ratio

1. From the Random Access mode menu, successively select item *GEOMETRY* and *ASPECT RATIO*. (menu 15-17)
2. Press **ENTER** or selection wheel to toggle the correct image Aspect Ratio between brackets.  
The format of the displayed image is adapted automatically to the new format.
3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-17



Menu 15-18



## 15.6 Image Side Keystone

### About Keystone

When the projection axis is not perpendicular on the screen, perspective distortion of the displayed image may occur. Side keystone adjustment allows to compensate the distortion.

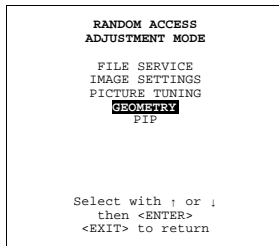
Side keystone can be adjusted per file or once for all files.

### Keystone correction for ALL or per file

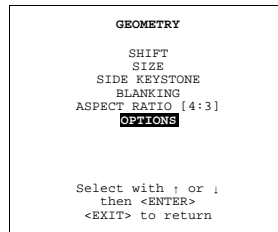
1. From the Random Access mode menu, successively select item *GEOMETRY* and *OPTIONS*. (menu 15-19)

The Geometry Options menu appears on-screen and in the graphical display, requesting to apply the keystone correction to ALL files Yes or Not. (menu 15-21)

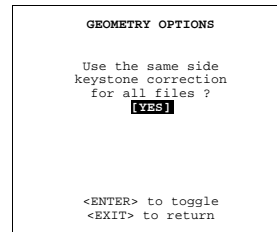
2. Press **ENTER** or selection wheel to toggle the correct answer between brackets.
3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-19



Menu 15-20



Menu 15-21

### Keystone correction adjustment

- From the Random Access mode menu, successively select item *GEOMETRY* and *SIDE KEYSTONE*. (menu 15-22)

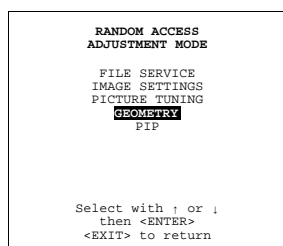
The Side keystone bar scale appears on-screen and in the graphical display (A numeric value of "0" on the bar scale indicates no keystone correction applied).

- Proceed to the side keystone adjustment:

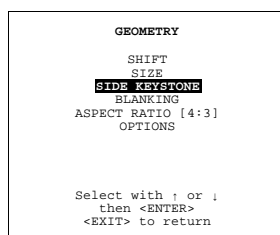
The adjustment can be done with the Remote Control or with the selection wheel on the ACSAR.

Adjustment		
With Remote control	Numeric buttons (Max. value between +255 and -255)	<ul style="list-style-type: none"> <li>Press <b>ENTER</b> to activate the numeric value on the bar scale. The first digit is active and can be changed.</li> <li>Enter new value, using the digit buttons on the Remote Control. Next digit becomes active.</li> <li>Enter new value for second digit, using the digit buttons on the Remote Control. Last digit becomes active.</li> <li>Enter new value for third digit, using the digit buttons on the Remote Control and terminate value entry with <b>ENTER</b>.</li> <li>Press <b>EXIT</b> to return.</li> </ul>
	Cursor keys← and →	<ul style="list-style-type: none"> <li>Press the cursor keys ← or → until the desired keystone correction is obtained.</li> <li>Press <b>EXIT</b> to return.</li> </ul>
With selection wheel	<ul style="list-style-type: none"> <li>Rotate selection wheel until desired keystone correction on screen is obtained.</li> <li>Press selection wheel to confirm and return. (image 15-6)</li> </ul>	

- Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-22



Menu 15-23

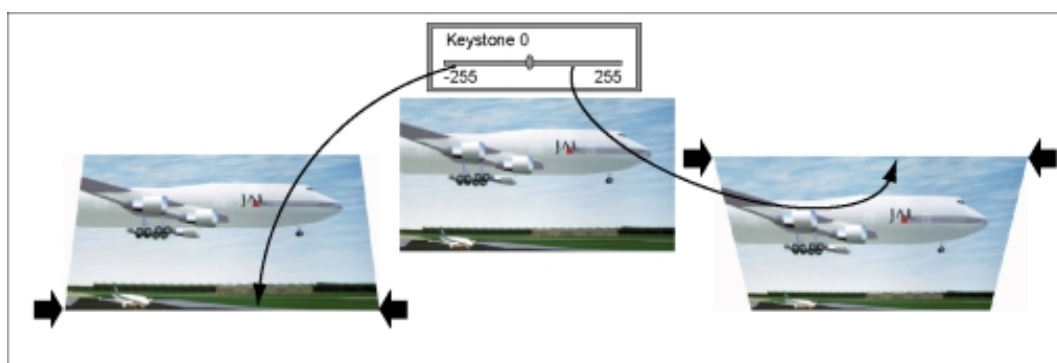


Image 15-6  
Side keystone correction

## 15.7 Vertical and Horizontal Image Shift

### How to shift the image

1. From the Random Access mode menu, successively select item *GEOMETRY* and *SHIFT*. (menu 15-24)

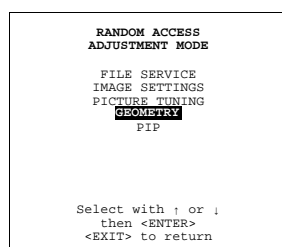
The Horizontal Shift bar scale appears on-screen and in the graphical display (A numeric value of "0" on the bar scale indicates no shift correction applied).

2. Proceed to the Vertical and Horizontal shift adjustment:

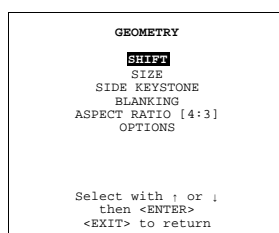
The adjustment can be done with the Remote Control or with the selection wheel on the ACSAR.

Adjustment		
With Remote control	Numeric buttons (max. value between +255 and -255)  Changing from Vert. to Hor. shift bar scale, press respectively once cursor key ↑ or →.	<ul style="list-style-type: none"> <li>• Press <b>ENTER</b> to activate the numeric value on the bar scale. The first digit is active and can be changed.</li> <li>• Enter new value (only a + or -), using the digit buttons on the Remote Control. Next digit becomes active.</li> <li>• Enter new value for next digit, using the digit buttons on the Remote Control. Next digit becomes active.</li> <li>• Repeat the same action for the other digits and terminate value entry with <b>ENTER</b>.</li> <li>• Press <b>EXIT</b> to return.</li> </ul>
	Horizontal Shift Cursor keys ← and →	<ul style="list-style-type: none"> <li>• Press the cursor keys ← or → to display the horizontal shift bar scale.</li> <li>• Press the cursor keys ← or → until the desired horizontal shift is obtained.</li> <li>• Press <b>EXIT</b> to return.</li> </ul>
	Vertical Shift Cursor keys ↑ and ↓	<ul style="list-style-type: none"> <li>• Press the cursor keys ↑ or ↓ to display the vertical shift bar scale.</li> <li>• Press the cursor keys ↑ or ↓ until the desired vertical shift is obtained.</li> <li>• Press <b>EXIT</b> to return.</li> </ul>
With selection wheel	<ul style="list-style-type: none"> <li>• At start up, horizontal shift bar scale is displayed.</li> <li>• Rotate selection wheel until desired horizontal shift correction on screen is obtained.</li> <li>• Press selection wheel to display vertical shift bar scale.</li> <li>• Rotate selection wheel until desired vertical shift correction on screen is obtained.</li> <li>• Press selection wheel to confirm and return.</li> <li>• To repeat steps, press selection wheel again. (image 15-7)</li> </ul>	

3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 15-24



Menu 15-25

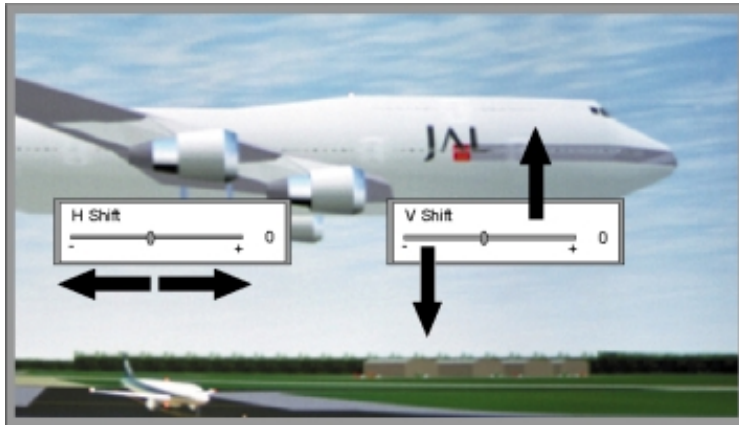


Image 15-7  
Horizontal and Vertical shift adjustment

## 15.8 Vertical and Horizontal Image Size

### How to adjust the image size

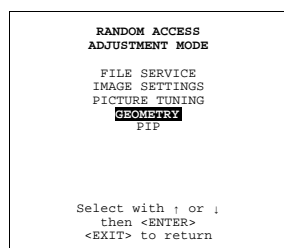
1. From the Random Access mode menu, successively select item *GEOMETRY* and *SIZE*. (menu 15-26)

The Horizontal Size bar scale appears on-screen and in the graphical display (A numeric value of "0" on the bar scale indicates no size correction applied).

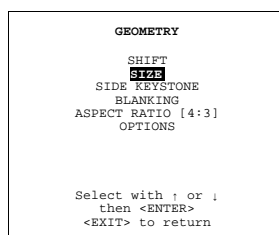
2. Proceed to the Vertical and Horizontal size adjustment:

The adjustment can be done with the Remote Control or with the selection wheel on the ACSAR.

Adjustment		
With Remote control	Numeric buttons (Max. value between +511 and -511)  Changing from Vert. to Hor. size bar scale, press respectively once cursor key ↑ or →.	<ul style="list-style-type: none"> <li>• Press <b>ENTER</b> to activate the numeric value on the bar scale. The first digit is active and can be changed.</li> <li>• Enter new value (only a + or -), using the digit buttons on the Remote Control. Next digit becomes active.</li> <li>• Enter new value for next digit, using the digit buttons on the Remote Control. Next digit becomes active.</li> <li>• Repeat the same action for the other digits and terminate value entry with <b>ENTER</b>.</li> <li>• Press <b>EXIT</b> to return.</li> </ul>
	Horizontal Size Cursor keys ← and →	<ul style="list-style-type: none"> <li>• Press the cursor keys ← or → to display the horizontal size bar scale.</li> <li>• Press the cursor keys ← or → until the desired horizontal size is obtained.</li> <li>• Press <b>EXIT</b> to return.</li> </ul>
	Vertical Size Cursor keys ↑ and ↓	<ul style="list-style-type: none"> <li>• Press the cursor keys ↑ or ↓ to display the vertical size bar scale.</li> <li>• Press the cursor keys ↑ or ↓ until the desired vertical size is obtained.</li> <li>• Press <b>EXIT</b> to return.</li> </ul>
With selection wheel	<ul style="list-style-type: none"> <li>• At start up, horizontal size bar scale is displayed.</li> <li>• Rotate selection wheel until desired horizontal size correction on screen is obtained.</li> <li>• Press selection wheel to display vertical size bar scale.</li> <li>• Rotate selection wheel until desired vertical size correction on screen is obtained.</li> <li>• Press selection wheel to confirm and return.</li> <li>• To repeat steps, press selection wheel again. (image 15-8)</li> </ul>	



Menu 15-26



Menu 15-27

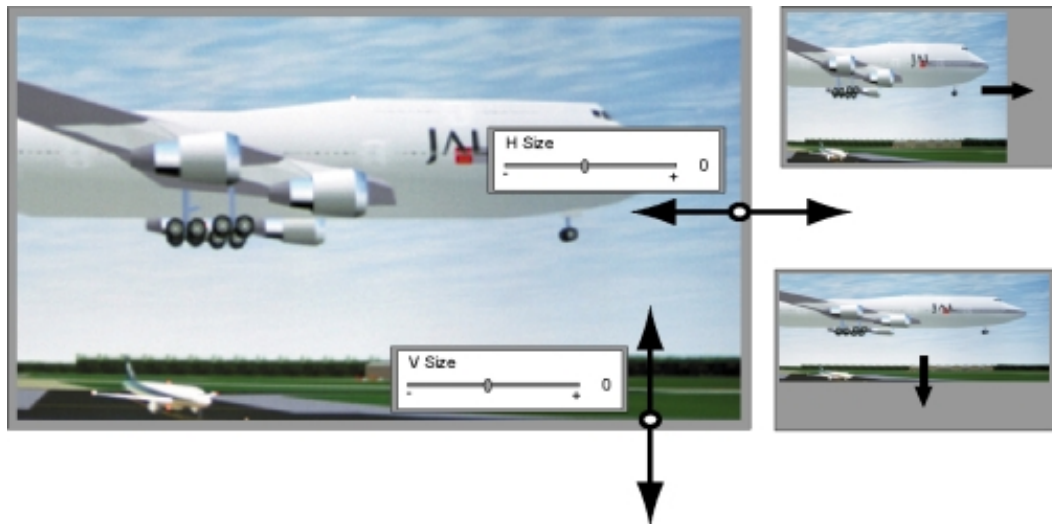


Image 15-8  
Horizontal and Vertical size adjustment

## 16. ADDITIONAL SET UPS

### Overview

- Entering the Installation menu
- Image transition when switching between sources
- On Screen Display
- Internal Generated Testpatterns
- Auto Shutdown when no Input Signal
- Quick Access Keys

### Summary of the additional set ups.

The additional set ups can be find as items of the Installation menu. The items are:

- The way of source switching.
- Place and color of the OSD on the screen.
- Available internal patterns.
- Shutdown yes or not and adjustable in time in case of no input signal.
- Overview of quick access keys.

### 16.1 Entering the Installation menu

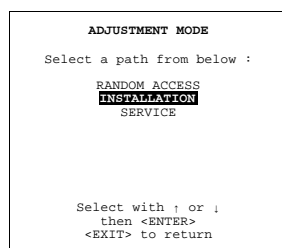
#### How to enter the Installation menu

1. From the Adjustment mode menu, select item *INSTALLATION*. (menu 16-1)

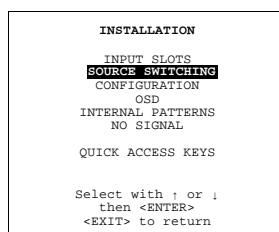
The Installation menu appears on-screen and in the graphical display. (menu 16-2)

2. Respectively select the items after INPUT SLOTS and proceed to the set up (see below).

**Note:** Item *CONFIGURATION* is not active and as result not selectable.



Menu 16-1



Menu 16-2

## 16.2 Image transition when switching between sources

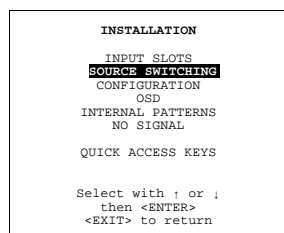
### How to apply an image transition

Seamless transition mode can be applied during input source switching. There is a choice between 6 different effects which render the transition more enjoyable.

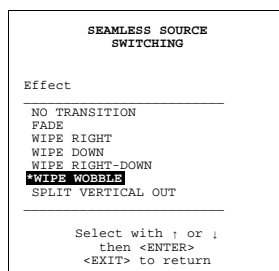
1. From the Installation menu, select item *SOURCE SWITCHING*. (menu 16-3)

The Source Switching menu appears on-screen and in the graphical display. The Source Switching menu contains a list of all available transitions effects. The already active transition effect is preceded with an asterisk. (menu 16-4)

2. Select the desired transition and press **ENTER** to confirm.
3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 16-3



Menu 16-4

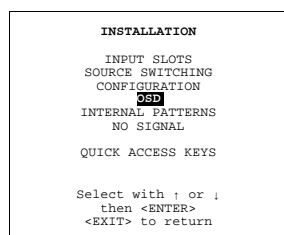
## 16.3 On Screen Display

### How to change the color of the OSD

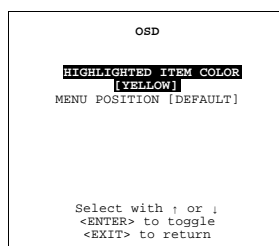
1. From the Installation menu, select item *OSD*. (menu 16-5)

The OSD menu appears on-screen and in the graphical display. The OSD menu contains 2 items, color choice and position of the OSD. (menu 16-6)

2. Select item *HIGHLIGHTED ITEM COLOR [YELLOW]*.
3. Press the **ENTER** key or selection Wheel to toggle the desired color (Yellow, Green or Red) for the OSD between brackets.
4. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 16-5



Menu 16-6

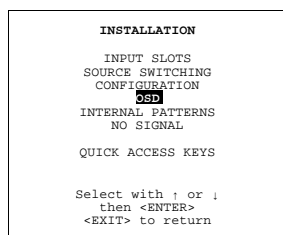


### How to define the OSD position

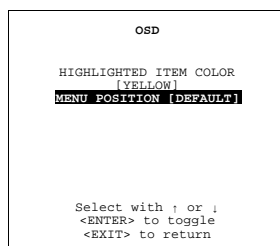
1. From the Installation menu, select item *OSD*. (menu 16-7)

The OSD menu appears on-screen and in the graphical display. The OSD menu contains 2 items, color choice and position of the OSD. (menu 16-8)

2. Select item *MENU POSITION [DEFAULT]*.
3. Press the **ENTER** key or selection Wheel to toggle the desired position (Default or Center) for the OSD between brackets.
  - **DEFAULT**: the menus are displayed in the center and the adjustment boxes in the corner of the image.
  - **CENTER**: the menus and the adjustment boxes are displayed in the center of the image.
4. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 16-7



Menu 16-8

## 16.4 Internal Generated Testpatterns

### How to select a testpattern

The ACSAR can generate 8 different testpatterns, useful for geometry, focus alignment and image evaluation.

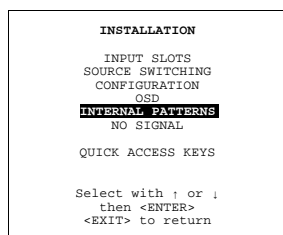
1. From the Installation menu, select item *INTERNAL PATTERNS*. (menu 16-9)

The Internal Pattern menu appears on-screen and in the graphical display. The Internal Patter menu contains 8 different internal generated testpatterns. (menu 16-10)

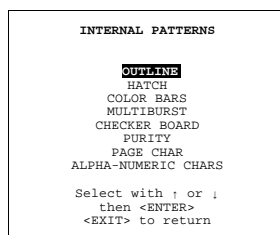
2. Select the desired testpattern and press the **ENTER** key or selection Wheel to confirm.

The selected testpattern is displayed on the screen.

3. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 16-9



Menu 16-10

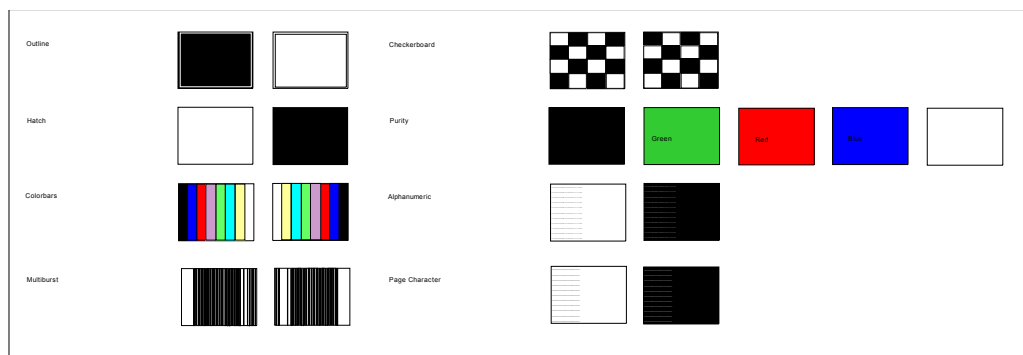


Image 16-1  
Internal generated testpatterns

## 16.5 Auto Shutdown when no Input Signal

### About Auto Shutdown

When no input signal or an input signal out of specs is available on the active input module, the system starts the automatic shutdown procedure if Shutdown mode has been enabled.

### How to activate the Auto Shutdown

1. From the Installation menu, select item *NO SIGNAL*. (menu 16-11)

**Note:** The item to change the background color in the No Signal menu is not available. For that reason the concerning text is displayed in grey on-screen and not displayed in the graphical display.

The No Signal menu appears on-screen and in the graphical display. The No Signal menu contains 2 items, activation of the auto shutdown and in that case setting the shutdown delay time (adjustable between 5 min and 60 min). (menu 16-12)

2. Select item SHUTDOWN [OFF] and press the **ENTER** key or selection Wheel to toggle the shutdown mode to ON or OFF.

If the shutdown mode has been enabled, then the shutdown time can be adjusted.

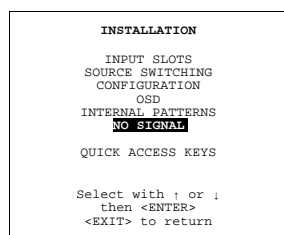
3. Select item SHUTDOWN TIME 5 MIN . (menu 16-13)

The 2 digit shutdown time is activated with the first digit ready to be changed.

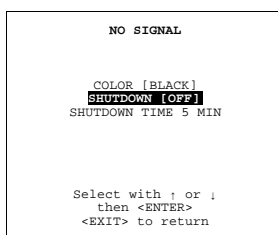
4. Change the digits as follows:

- With the Remote Control: press the cursor keys ↑ or ↓ or enter the digits directly with the digit buttons. Press **ENTER** to confirm.
- With the selection wheel on ACSAR: rotate the wheel to change the digit and press it to confirm.

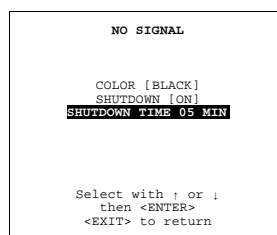
5. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 16-11



Menu 16-12



Menu 16-13

## 16.6 Quick Access Keys

### Overview

- Overview Quick Access keys
- Linking a Menu to a Quick Access Key
- PIP Source Quick Access Key

### 16.6.1 Overview Quick Access keys

#### About Quick Access Keys

A specific menu in the adjustment mode can be linked to a function key in order to have quick access on it.

The '0' digit on the Remote Control allows a quick entering the Pixel In Pixel (PIP) mode.

## How to get the overview

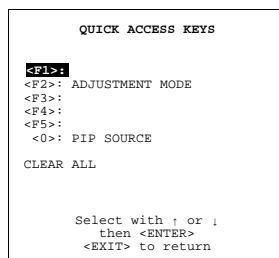
1. From the Installation menu, select item **QUICK ACCESS KEYS** (menu 16-14)

The Quick Access Keys menu appears on-screen and in the graphical display. The Quick Access Keys menu displays an overview of the function keys F1 up to F5 with beside it the heading of the linked menu, if programmed. (menu 16-15)

2. Press **EXIT** (RCU) or select item RETURN (ACSAR) to return.



Menu 16-14



Menu 16-15

## 16.6.2 Linking a Menu to a Quick Access Key



Programming the quick access keys is only possible using the function buttons on the Remote Control.

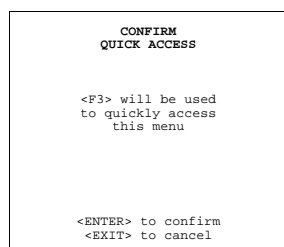
### How to link a menu to a quick access key

1. Select the menu you desire to link to a function key, e.g. INSTALLATION.
2. Press the function key, until the Confirm Quick Access menu appears, the menu has to be linked to, e.g. function key <F3>.

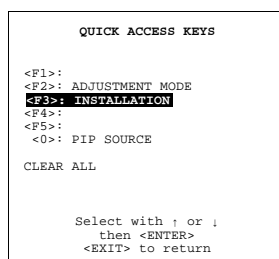
A confirm quick access menu appears on-screen and in the graphical display requesting confirmation of the programmed link. (menu 16-16)

3. Press **ENTER** to confirm or **EXIT** to cancel.

If the key programming has been confirmed, then the heading of the linked menu will be added to the function key in the overview of the quick access keys. (menu 16-17)



Menu 16-16



Menu 16-17

## 16.6.3 PIP Source Quick Access Key

### How to enter a PIP source

1. Press digit button "0" on the Remote Control (This action overrules the status [OFF] of the PIP mode).

In the right bottom corner (position adjustable) of the screen appears for a few seconds a request box, allowing to enter the PIP source number. (image 16-2)

2. Enter the source number of the image you will insert as PIP, using the digit buttons on the Remote Control.

The selected source appears as PIP in the right top corner of the image.

3. To insert another PIP source, repeat the procedure from step 1.

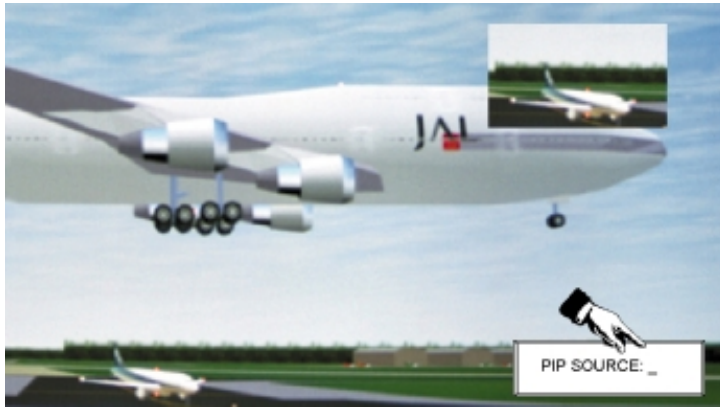


Image 16-2  
PIP source insertion

# 17. UPGRADING TOUCH PANEL D-CINE PREMIERE

## 17.1 Upgrade Touch Panel

### Why upgrade!

After the ACSAR has been mounted in the D-Cine Premiere, proceed to the upload of a new menu structure in order to provide the Touch Panel with the ACSAR functionality.

### Where to find?

For the upgrade of the touch panel, refer to the D-Cine Communicator software manual, edition Post Production or Engineer. See below the upload procedure.

## 17.2 Upgrading the Touch panel menu structure

### How to upgrade

1. Check the radio button in front of the Touch Panel Menu Structure and click **Load**. (image 17-1)

A browser window opens.

2. Select the touch panel menu structure file for the Touch Panel. Click on **Open**.

The new settings will be loaded in the Touch Panel.

Files to upload are typically called depending of the projector configuration. E.g. :

Menu M7 Chinese V2.0 bin	Uses Chinese fonts for projector without an ACSAR
Menu M7 Chinese with ACSAR V2.0 bin	Uses Chinese fonts for projector with an ACSAR
Menu M7 English V2.0 bin	Uses English fonts for projector without an ACSAR
Menu M7 English with ACSAR V2.0 bin	Uses English fonts for projector with an ACSAR

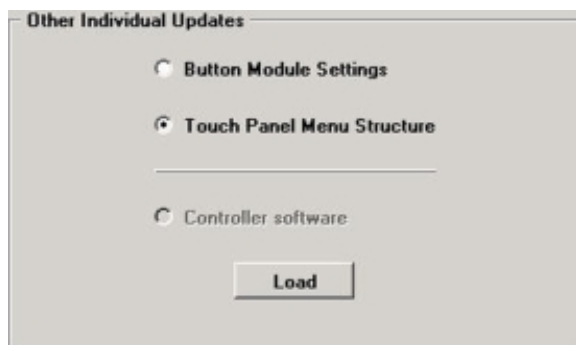


Image 17-1  
Touch panel upgrade



**If the connection to the projector was broken during this upload, you can restart the procedure. It is recommended to physically power OFF/ON the touch panel before retrying a new Touch panel menus structure upload.**

### Typical update timings

Ethernet	14 to 16 minutes
Serial Connection to RS232/422:22	22 to 24 minutes
Serial Connection to Loop In / Out	18 to 20 minutes



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## Revision Sheet

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Please correct the following points in this documentation (**R5976519/00**):

page

wrong

correct